Bibliography on stable distributions, processes and related topics

John Nolan
jpnolan@american.edu

Original version August 4, 2003
Revised June 17, 2024

The following sections are a start on organizing references on stable distributions by topic. It is far from complete. Starting on page 23 there is an extensive list of papers, most on stable distributions. Someday I may have the time to edit those out, but for now please ignore those references. This list includes a bibliography file provided years ago by Gena Samorodnitsky from Cornell University.

Some references on max-stable laws are also included, because there are some connections between sum-stable and max-stable laws.

I would like to keep this list correct and up-to-date. If you have corrections or additions, please e-mail them to me at the above address, and suggest where to place your references in one of the sections below. A sentence or two summarizing the content would be useful. Please provide all references in BibTeX form, especially if you have more than one or two additions. (See `http://en.wikipedia.org/wiki/BibTeX` for basic information on BibTeX.) Please send a copy of your papers along.

Contents

1 Univariate stable distributions

1.1 General references

The first chapter of Nolan (2020b) is available online as "An introduction to stable distributions" at: `academic2.american.edu/~jpnolan/stable/stable.html`. Chapter 9 of Breiman (1992) gives a clear exposition of univariate stable laws. More detail can be found in Ibragimov and Linnik (1971), Zolotarev (1986b), Uchaikin and Zolotarev (1999), Samorodnitsky and Taqqu (1994b), Nikias and Shao (1995).

1.2 Computations of stable densities, cdf, simulation, etc.

Worsdale (1975), Panton (1992), Nolan (1997), Nolan (1999a), Robinson (2003a), Robinson (2003b), Robinson (2003c), Matsui and Takemura (2006), Matsui (2005), Chekhmenok (2003), Cheng and Liu (1997), Wang and Zhang (2008), Liang and Chen (2013), Julián-Moreno et al. (2017), del Val et al. (2017), Boyarchenko and Levendorskiĭ (2020), Saenko (2020), Saenko (2022), Saenko (2023)

Special cases (generally α a rational number): Fox (1961), Mitra (1981), Mitra (1982), Schneider (1986), Hoffmann-Jørgensen (1994), Zolotarev (1995), Chekhmenok (2003), Penson and Górska (2010), Górska and Penson (2011).

The standard method for simulating univariate stable terms is Chambers et al. (1976); the formula is stated in the introductory chapter mentioned in Section 1.1. The original paper does not give a proof of the method, but focuses on the computational steps, and uses the 0-parameterization (the M parametrization of Zolotarev).

Fractional and truncated moments: Hardin (1984), Paolella (2007), Pinelis (2011), Matsui and Pawlas (2013), Nolan (2018).

1.3 Generalized Central Limit Theorem and Domains of Attraction

de Haan and Peng (1999), Geluk and de Haan (2000), Geluk and Peng (2000), de Haan et al. (2002)

Central pre-limit theorem: Klebanov et al. (1999), Klebanov et al. (2000), Klebanov et al. (2006).

Fuchs et al. (2001) state a different criteria for being in the domain of attraction of a positive stable distribution ($\alpha < 1$, $\beta = 1$)

Rates of convergence to a stable law: Cramér (1962), Cramér (1963), Hall (1981b), Christoph and Wolf (1992), de Haan and Peng (1999), Kuske and Keller (2001), Rachev (1991), Bobkov et al. (2011), Bobkov. et al. (2012), and Börgers and Greengard (2018).

Generalized central limit theorem with dependent terms. For infinite variance summands with normal limit: Bradley (1988), Peligrad (1990), Bradley (1992), Berkes and Philipp (1998), Shao (1993).

For infinite variance summands with non-normal stable limit: Davis (1983), Denker and Jakubowski (1989), Jakubowski and Kobus (1989), Jakubowski (1991), Jakubowski (1993), Dabrowski and Jakubowski (1994), Louhichi and Soulier (2002), Bartkiewicz et al. (2011), Basrak et al. (2012), Buriticá et al. (2021)

1.4 Statistical estimation, diagnostics, assessing fit, hypothesis testing

Estimation of parameters: Nolan (2001a), McCulloch (1986), Nikias and Shao (1995), Tsihrintzis and Nikias (1996), Nolan (1998b), Nolan (1999b), Ojeda-Revah (2001), Beaulieu et al. (2005), Dufour and Kurz-Kim (2005), Garcia et al. (2011), Fan (2006a), Brcich et al. (2005), Ferguson (1978), Copas (1975), Haas et al. (1970), Meintanis (2007), Höpfner (1998), Höpfner and Rüschendorf (1999), SenGupta and Roy (2001), Matsui and Takemura (2008a), Kharrat and Boshnakov (2015), Yanushkevichiene and Saenko (2013), Saenko (2016), Barker (2014), Basu and Pakrashi (2018), Meraghni and Soltane (2019), Fahs and Abou-Faycal (2018), Véhel et al. (2021), Hajjaji et al. (2023)

Calculation of Fisher information matrix for MLE of stable parameters: DuMouchel (1973a), Nolan (2001a), Matsui and Takemura (2006), Barker (2015), Matsui (2021).

Empirical characteristic function methods: Koutrouvelis (1980), Koutrouvelis (1981), Csorgo (1981), Feuerverger and Mureika (1977), Feuerverger and McDunnough (1981b), Feuerverger and McDunnough (1981a), Kogon and Williams (1998), Yu (2004), Besbeas and Morgan (2008), Bibalan et al. (2017), Kateregga et al. (2017), Zhang (2018)

Approximate maximum likelihood estimation Bee and Trapin (2018).

Minimum distance estimator of α: Hu et al. (2014)

L-estimators: Zhang (2010).

Bayesian MCMC approach Buckle (1993), Buckle (1995), Godsill (1999), Godsill and Kuruoğlu (1999), Godsill (1999), Godsill (2000), Kuruoğlu (2001), Lombardi and Godsill (2006a), Lombardi (2007a), Peters et al. (2012), Howlader and Weiss (1988), Tsionas (1999), Tsionas (2000), Tsionas (2013), Bernardi and Casarin (2008), Güner et al. (2010), Riabiz et al. (2015), Lemke and Godsill (2012), Lemke and Godsill (2014), Lemke (2014), Lemke and Godsill (2015), Lemke et al. (2015), Achcar et al. (2013), Vankov et al. (2019), Karling et al. (2020)

Levi and Craiu (2021)

Circular statistic based method: SenGupta and Roy (2019)

General information on assessing fit D'Agostino and Stephens (1986), Frain (2007b), Frain (2009), Matsui and Takemura (2008a), Kallenberg et al. (1985), McCulloch and Percy (2013), Paolella (2015), Santana et al. (2015), de Sousa and Michailidis (2004), Gel et al. (2007), Nolan (2016b). Heyde and Kou (2004) emphasizes the problems in determining tail decay rate, and shows that in general it will take very large data sets to distinguish exponential decay from power

law decay. Histogram bin width selection Scott (1979). Graphical diagnostics for heavy tailed data: Alstott et al. (2014), Nolan (2020a);

Goodness-of-fit tests: Saniga and Hayya (1977), Borak et al. (2005), Matsui and Takemura (2008a), González-Estrada and nor Alva (2010), Yang (2012), Beaulieu et al. (2014), Teimouri et al. (2015), Santana et al. (2015), Rizzo and Székely (2016), Meintanis (2016), Zhang (2018), Pitera et al. (2021)

Empirical process model with estimated parameters: Section 4.2 of del Barrio et al. (2007)

Tail estimation: Hill (1975), McCulloch (1997), Paulauskas (2003), Paulauskas and Vaiciulis (2011), Resnick and Stărică (1995), Resnick and Stărică (1997), Marohn (1999).

Empirical likelihood: Kunitomo and Owada (2006).

Wavelet based: Antoniadis et al. (2006).

Estimation of concentration data Benson et al. (2001), Rishmawi (2005), Chakraborty et al. (2009).

Comparison of estimators: Akgiray and Lamoureux (1989), Höpfner and Rüschendorf (1999), Ojeda-Revah (2001), Nolan (2020b).

1.5 Miscellaneous univariate stable

Characterization problems: Yanushkevichius and Yanushkevichiene (2007)

Law of iterated logarithm for stable summands: Chover (1966), Breiman (1968a), Mijnheer (1972), Pakshirajan and Vasudeva (1977), Qi and Cheng (1996).

Analytic properties of stable laws: Zolotarev (1986b), Gawronski (1984) (mistake in proof, see following), Simon (2011a).

Unimodality: Ibragimov and Chernin (1959) (mistake, see following), Kanter (1976a), successful proof Yamazato (1978), Wolfe (1978a), Wolfe (1978b), Wolfe (1981), Hall (1984), Dharmadhikari and Joag-Dev (1988), Simon (2011a), Simon (2011b), Simon (2012). Location of mode Gawronski and Wiessner (1992), Fofack and Nolan (1999).

Bell-shaped densities: Gawronski (1984) (mistake in proof, see Simon (2015)), Gawronski (1988), Simon (2015), and finally a successful proof that all stable densities are bell-shaped in Kwaśnicki (2020). See also Kwaśnicki and Simon (2019).

Functions of stable random variables: Otiniano et al. (2013), Rathie et al. (2016), Davis et al. (2018).

U-Statistics: Malevich and Abdalimov (1977), Dehling et al. (1984), Dehling and Taqqu (1989a), Chapter 6 of Christoph and Wolf (1992), Heinrich and Wolf (1993), de la Pena and Montgomery-Smith (1995). Dabrowski et al. (2002), Decreusefond et al. (2016), Teimouri et al. (2017)

2 Application areas

2.1 Engineering

The standard models of signal processing are based on Gaussian noise. While this works well in many problems, this assumption is not accurate in some situations where there is impulsive, heavy-tailed noise. In such situations, linear Gaussian filters perform poorly. Using methods based on stable models gives robust nonlinear signal processing methods.

General books: Nikias and Shao (1995), Arce (2005), Sheng et al. (2012)

General: Kuruoglu (1998), Der (2003), Lowen and Teich (1990), Ma and Nikias (1995), Pierce (1997), Tsakalides and Nikias (1995), Keshner (1982), Tsihrintzis and Nikias (1996), Ma and Nikias (1995), Kuruoglu and Fitzgerald (1998), Kuruoglu et al. (1998), Astola and Neuvo (1992), Kuruoglu et al. (1997), Kuruoglu et al. (1998), Kosko (2006), Gonzalez et al. (2006), Kalluri and Arce (1998) Ilow et al. (1998), Ilow (1995), Ilow and Hatzinakos (1998a), Ilow (1999), Ilow and Hatzinakos (1997), Ilow and Hatzinakos (1998b), Núñez et al. (2008), Nolan (2008), Gonzalez et al. (1997), Gonzalez and Nolan (2007), Wang et al. (2009b), Liu et al. (2008), Zha and Qiu (2007), Tsihrintzis and Nikias (1995), Zimmermann and Dostert (2002), Rupi et al. (2004), Rupi et al. (2000), Legg et al. (2007), Legg (2010), Mahmood and Chitre (2015), Talebi et al. (2018), Shongwe et al. (2015)

Filtering Cauchy noise: Kim et al. (2020)

Stuck (2000) gives an overview of early work on stable laws in signal processing. See also: Mertz (1965), Stuck (1976a), Stuck (1976b), Stuck (1978), and Newman and Stuck (1979).

The following papers apply stable distributions to biomedical signals: Pander (2003), Pander (2004), Pander (2006), Pander (2010), Pander and Przybyła (2012), Pander et al. (2012), Servin-Aguilar et al. (2020).

See also Ghannudi et al. (2007), Azzaoui and Clavier (2007), Azzaoui et al. (2003), Win et al. (2009), Ghannudi et al. (2010), Azzaoui and Clavier (2010).

Bhaskar et al. (2008), Bhaskar et al. (2010), Mihaylova et al. (2005), Nolan et al. (2010).

Chen et al. (2017), Chen et al. (2016), Kuruoglu and Wang (2016), Karakuş et al. (2018), Wang et al. (2018a), Hu et al. (2023).

Generalizations of the Kalman filter: Stuck (1978), Balakrishna and Hareesh (2009), Le Breton and Musiela (1993), Sornette and Ide (2001), Gordon et al. (2003), Tzagkarakis and Tsakalides (2009), Idan and Speyer (2010), Idan and Speyer (2012a) , Idan and Speyer (2013), Hao et al. (2023)

Particle filters: Mihaylova et al. (2005), Gençağa et al. (2008), Kittichotpanich (2008), Li et al. (2017), Cortés-Aburto et al. (2018), McCulloch (2020), Kołodziejczyk and Tarasenko (2021)

Compressive sampling in an impulsive environment: Ramirez et al. (2010), Arce et al. (2010), Otero and Arce (2011a), Li et al. (2007), Tzagkarakis and Tsakalides (2009), Tzagkarakis et al. (2018), Tzagkarakis et al. (2019), Tzagkarakis et al. (2021), Lopes (2016), Zhou and Yu (2017), Carrillo et al. (2016),

Liu et al. (2019), Yousufi et al. (2019)

Time delay estimation and direction of arrival: Georgiou et al. (1999), Pena et al. (2020), Oliinyk and Lukin (2020), Oliinyk et al. (2021), Zha and Qiu (2007), Asghari et al. (2022), Asghari et al. (2023)

Impulsive noise in powerline communications: Karakuş et al. (2020)

Hagglund and Axell (2019), Hagglund and Axell (2020)

Wind power: Gaidai et al. (2020), Simiu et al. (2001), Xu, Wu, Yang, Wang, and Wang (Xu et al.)

Modeling noise from the melting of icebergs with stable distributions is discussed by Glowacki et al. (2018).

Implusive noise and the Internet of Things (IoT) and Artificial Intelligence of Things (AIoT) Wang et al. (2023)

2.1.1 Radar processing

Banerjee et al. (1999), Kapoor et al. (1999), Achim et al. (2002), Achim et al. (2003), Amiri and Amindavar (2005), Belkacemi and Marcosa (2007), Messali and Soltani (2007), Tsakalides and Nikias (1999), Tsakalides et al. (1999), Tsakalides et al. (2000), Pierce (1996), Lee (1999), Kuruoglu and Zerubia (2004), Farina et al. (1997), Xiong et al. (2023), Johnson et al. (2023)

2.1.2 Image processing

Wainwright et al. (2001), Carassso (2002), Carassso (2006), Kuruoglu and Zerubia (2003), Arce (2005), Nava-Tudela (2017), Boccignone and Ferraro (2013), Karine (2014), Boudjelal et al. (2012), Padilla et al. (2015), Tavana et al. (2017), Krbcová et al. (2018), Li et al. (2020), Shi et al. (2020), Ai et al. (2023), Muren et al. (2021), Muren et al. (2024)

2.1.3 Telecommunications

Land lines: Stuck and Kleiner (1974), Mertz (1965). Cell phones: Yang and Petropulu (2001b), Gonzalez (1997), Aysal (2007), Georgiadis (2000), Georgiadis (2001), Georgiadis (2005), Rabbachin et al. (2011), Jaoua et al. (2014), Li et al. (2019), Barazideh et al. (2019), Aghazadeh Ayoubi and Spagnolini (2022)

Vehicle-to-vehicle communication Bazzi et al. (2019)

Robust receiver design Clavier et al. (2021)

Kutuzov et al. (2024) model the input data rate for 5G video traffic using stable laws.

2.1.4 Acoustics (including sonar and ultrasound)

Kidmose (2001), Kidmose (2002), Chitre et al. (2006), Chitre et al. (2004), Chitre et al. (2005), Chitre et al. (2007), Zha and Qiu (2006a), Zha and Qiu (2006b), Kyriakakis et al. (1999), Petropulu et al. (1996), Peterson et al. (2003), Georgiou et al. (1999), Achim et al. (2001a), Taroudakis et al. (2006), Petropulu

et al. (1996). Fialkowski et al. (2004), Fialkowski and Gauss (2010), Pelekanakis et al. (2018), Zhidkov (2018b)

Frequency dependent lossy media: Szabo (1994), Kelly and McGough (2007), Kelly et al. (2008), Kelly (2008), Chen and Holm (2003), Zhao and McGough (2016), Pereyra and Batatia (2012), Murray and McGough (2022a), Murray and McGough (2022b).

For multivariate isotropic stable laws, see Nolan (2013).

2.1.5 Network modeling

Erramilli et al. (1996), Leland et al. (1994), Parulekar and Makowski (1996), Paxson and Floyd (1994), Willinger et al. (1997), Souryal et al. (2003), Wolpert and Taqqu (2005), Mikosch et al. (2002), Beran et al. (1995), Petropulu et al. (2000), Yang and Petropulu (2001a), Yang and Petropulu (2003), Yu et al. (2005), Cappé et al. (2002), Muñoz-Rodriguez et al. (2006), Simmross-Wattenberg et al. (2008).

Clauset et al. (2009), Virkar and Clauset (2014), Broido and Clauset (2018).

2.1.6 Queueing theory

Heath et al. (1997), Heath et al. (1998), Heath et al. (1999), Volume 33 of Queueing Systems (1999). Boxma and Dumas (1996), Resnick and Samorodnitsky (1997b), Resnick and Samorodnitsky (2001), Resnick and Samorodnitsky (1997a), Szczotka and Woyczyński (2004), Szczotka and Woyczyński (2003)

2.1.7 ICA/blind source separation, PCA, clustering

Kidmose (2001), Kidmose (2002), Sahmoudi et al. (2004), Wang et al. (2009b), Alparslan et al. (2016), Magron et al. (2017), Mohammadi (2020), Guo et al. (2021)

Kriegel et al. (2008), Candés et al. (2010), Chenouri et al. (2014), Haug et al. (2013), Anderson et al. (2015), Pad and Unser (2015), Leglaive et al. (2017), Alparslan et al. (2016)

Mousavi et al. (2023)

2.1.8 Vibration noise

Li and Yu (2010) and Yu et al. (2013) use stable laws to model vibration data in industrial roller bearings. Further work on this topic and gear noise in Wodecki et al. (2016), Zak et al. (2016), Zak et al. (2017b), Zak et al. (2017a), Xu and Liu (2019), Sundaram et al. (2010), Xu and Liu (2019), Gao et al. (2019), Xue et al. (2019), Wei et al. (2024)

2.1.9 Miscellaneous engineering applications

Kosko and Mitaim (2001) and Kosko (2006) show that stochastic resonance also occurs with heavy tailed stable noise. See also Yilmaz and Savaci (2015), Ding

et al. (2019), Zhu et al. (2020).

Jeske and Chakravartty (2006) examine clock synchronization in the presence of heavy tailed noise.

Ayenu-Prah and Attoh-Okine (2009) find heavy tailed fluctuations in the study of road surfaces.

Stable distributions arising in marine environments: Fiche (2012).

Structural analysis of airplances del Rosario et al. (2021)

2.2 Finance, Economics, Value at Risk, Real Estate, Insurance

The main motivation for considering stable laws in finance is that empirical returns have heavier tails than the normal/Gaussian model predicts. And stable laws allow one to model cumulative returns using the stability of sums: if $X_1, X_2, \ldots, X_n$ are returns over one period with an α-stable distribution, then the cumulative return over n time periods $X_1 + X_2 + \cdots + X_n$ also has an α-stable distribution. This is true if the terms are independent or dependent stable, but is not true for non-stable models of returns.

2.2.1 Modeling asset returns

Rachev and Mittnik (2000), Nolan (2003), Mandelbrot (1960), Mandelbrot (1961), Mandelbrot (1963b), Fama (1963), Fama (1965), Fama and Roll (1968), Rachev (2003), McCulloch (1996a), McCulloch (1997), Bidarkota and McCulloch (1998), Peters (1994), Walter (1999), Belkacem et al. (2000), Haas et al. (2005), Lombardi and Calzolari (2005), Ortobelli and Rachev (2005), Borak et al. (2005), Martin et al. (2006), Frain (2007a), Frain (2009), Stuck (1976c), Leitch and Paulson (1975), Kozubowski et al. (2003), Dominicy et al. (2010), Hardy (2003), Carr et al. (2002), Kaplan (2010) and Kaplan (2012). Wright (2007) quotes Leslie Rahl, founder of Capital Market Risk Advisors, "We seem to have a once-in-a-lifetime crisis every three of four years."

Panas (2001) Bidarkota (1999), Bidarkota (2000), Bidarkota (2001), Bidarkota (2003), Bidarkota and McCulloch (2003), Bidarkota and McCulloch (2004), Kiani and Bidarkota (2004), Bidarkota (2004), Bidarkota and Dupoyet (2007b), Bidarkota and Dupoyet (2007a), Bidarkota et al. (2009), Wang and Bidarkota (2010), Wang and Bidarkota (2012).

Salhi et al. (2015), Champagnat et al. (2013), Cont (2001), Fries (2018), Gouriéroux and Zakoïan (2017), Massing (2019), Molina-Muñoz et al. (2020), Tzagkarakis et al. (2023), Chhetri et al. (2024), Bhandari et al. (2023)

VaR for Mexican equities: Serrano and Mata (2019)

Morningstar Encorr Analyzer now includes the ability to model returns with a stable distribution.

Extension of CAPM to include stable laws, portfolio selection: Fama (1971), Fama and Miller (1972), Press (1982), Rachev et al. (2005), section 17.4 of Uchaikin and Zolotarev (1999), Bawa et al. (1979), Rachev and Han (2000),

Ortobelli et al. (2002a), Ortobelli et al. (2004), Stoyanov et al. (2006), Reuss et al. (2016), Vasiukevich and Pinsky (2022), Belkacem (1997)

Jama (2009) and Naradh et al. (2022) look at returns for the South African financial system. The works by Cont and Tankov (2004), Tankov (2007), Kallsen and Tankov (2006) use Lévy processes to model returns, arguing that jumps are an important part of the behavior of actual returns that cannot be captured by a Gaussian model. A probability book with an emphasis on computational issues and finance, which includes a chapter on stable distributions, is Paolella (2007).

stable GARCH Bonato (2011), Broda et al. (2013)

CDOs Scherer and Prange (2009)

Energy markets: Pantalone et al. (2016)

Predicting shocks/crashes: Bielinskyi et al. (2019), Arrigoni et al. (2023)

Expected shortfall: Nolan (2018), Wang and Zitikis (2020)

Mixed-stable models: Belovas et al. (2021).

2.2.2 Option pricing

McCulloch (1996a), Carr and Wu (2003), Cartea and Howison (2003), Cartea and Howison (2007), Vollert (2001), Hurst et al. (1999), Hauksson and Rachev (2001).

2.2.3 Value at risk

Khindanova et al. (2001), Lamantia et al. (2006), Sy (2006), Marinelli et al. (2006), Frain (2008), Frain (2009).

2.2.4 Foreign exchange/parallel market/cryptocurrencies

Basterfield et al. (2003), Basterfield et al. (2005a), Basterfield et al. (2005b), Fofack and Nolan (2001), Lan and Tan (2007), Zhao and Wu (2009), Majoros and Zempléni (2018), Andria (2021)

Crytpocurrencies: Imtiaz et al. (2019), Kakinaka and Umeno (2020), Muvunza (2020), Börner et al. (2021), Börner et al. (2021), Levene (2021), Zieba (2019), Börner et al. (2022), Tzagkarakis and Maurer (2022)

2.2.5 Real estate

King and Young (1994), Young and Graff (1995), Graff et al. (1997), Brown (2000), Brown (2004), Brown (2005),Young et al. (2006), Young (2008). The first paper above argues that because of the non-normality of real estate prices, diversification is not a good idea (unless you have a huge portfolio); careful management of property is more important. Young and Brown (2023)

2.2.6 Insurance

Asmussen et al. (1997), Embrechts et al. (1997), Duczkowski (2021)

2.2.7 Commodity price modeling

Commodity pricing Weron (2005), Jin (2005), Weron (2006), Chinhamu et al. (2015), Günay and Khaki (2018), Rodriguez-Aguilar et al. (2019), Rodriguez Aguilar (2020)

2.2.8 Miscellaneous econ/finance

De Vany and Walls (1999), De Vany and Walls (2004a) De Vany (2003), and Walls (2005) argue that the extreme volatility in Hollywood movie revenues can be modeled with stable laws. De Vany (2006) uses truncated stable laws to model home runs in baseball. Also De Vany and Walls (2004b), De Vany and Walls (1996)

Lau and Lau (1993), Lau and Lau (1997), Fielitz and Rozelle (1983)

Ibragimov (2005) discusses consequences of heavy tails for economic models.

Farmer and Geanakoplos (2005) and Gabaix (2009) review the occurrence of power laws in economics and finance.

Li and Ma (2013) discuss a stable Cox-Ingersoll-Ross model for interest rates.

Copulas: Prange and Scherer (2006), Kallsen and Tankov (2006), Mikosch (2006).

Computational issues: Rachev (2004)

Discussion of the work of Nobel prize winners Thomas Sargent and Christopher Sims Boumans and Sent (2013).

International issues: Fofack and Nolan (2001), Heinrich et al. (2020a)

Agent-based models: Bargigli et al. (2016)

2.3 Extreme value theory

Fougéres et al. (2009) build models for multivariate dependent extreme value distributions using multiplicative mixtures with stable models. More information in Fougères et al. (2013).

2.4 Bayesian statistics

Suuronen et al. (2023)

2.5 Computer science

Long computation times: Harchol-Balter et al. (1998), Harchol-Balter (1999), Gomes and Selman (1999), Harchol-Balter (2013)

Streams and sketches, etc.: Indyk (2000), Cormode et al. (2002), Gilbert et al. (2002), Cormode (2003), Cormode and Muthukrishnan (2003), Cormode and Indyk (2006), Nelson (2011), Diao et al. (2019), Woodruff and Yasuda (2023).

Machine learning and α-stable graphical models: Misra and Kuruoglu (2014), Misra and Kuruoglu (2016), Anagnostopoulos (2020)

Anomaly detection: Simmross-Wattenberg et al. (2011), S. Mercan (2011), Simmross-Wattenberg et al. (2015), Bollmann et al. (2018).

Feature modeling: Fiche et al. (2013).

Chapter 14 of Yang (2018) uses Lévy flights in random search algorithms.

Using stable laws as mutation operators in evolutionary algorithms: Obuchowicz and Pretki (2005), Obuchowicz and Smolka (2016), Obuchowicz and Prkobuchetki (2004), Obuchowicz (2019).

Modeling sparse graphs: Caron and Fox (2017).

Non-Gaussianity of stochastic gradient noise: Georgiadis (2005), Şimşekli et al. (2020), Panigrahi et al. (2019), Panigrahi et al. (2019), Raj et al. (2022).

Differential privacy: Ito et al. (2021)

Consensus formation: Katoh and Shioda (2021)

Using stable laws in differential privacy: Zawacki and Abed (2023)

2.6 Random walks

Review paper Zaburdaev et al. (2015). Borovkov and Borovkov (2008) gives an exhaustive treatment of random walks when the distribution of step sizes is heavy tailed.

There have been several papers using Lévy flights to describe foraging behavior for different animals, see Viswanathan et al. (1996) and Viswanathan et al. (1999), Reynolds and Frye (2007). However, more recent work points out some errors in the data used in these papers and questions the relevancy of heavy tailed models for foraging, see Edwards et al. (2007) and Travis (2007). Marine foraging Humphries et al. (2010) and Viswanathan (2010). See also Bartumeus et al. (2003), Sims et al. (2008), Humphries et al. (2010), Humphries et al. (2012), Ali Ahmed et al. (2018), Mutwiri et al. (2019), Sims et al. (2019), Drew (2020).

Lévy swimmers under confinement Zhou et al. (2021)

Scaling laws in human travel Brockmann et al. (2006), Raichlen et al. (2013). Statistical issues in Kawai and Petrovskii (2012).

In random environments: Kesten et al. (1975), Hughes et al. (1981), Hughes (1995), Hughes (1996), Mayer-Wolf et al. (2004), Franke and Saigo (2009)

2.7 Branching processes

Jagers (1975), Dawson et al. (1989), Dawson and Perkins (1991), Vakolbinger and Vatutin (1998), Haynatzki et al. (2000), Fleischmann and Mytnik (2003), Birkner et al. (2005), Bojdecki et al. (2007), Chen and Shiozawa (2007), Berestycki et al. (2007), Croydon and Kumagai (2008), Basdevant and Singh (2008), Bojdecki et al. (2008), Pakes (2010)

2.8 Fractional/anomalous diffusions and turbulence

Stable densities give the Greens functions for certain fractional differential equations. Bouchaud and Georges (1990), Solomon et al. (1994), Gorenflo and

Mainardi (1998a), Mainardi et al. (2001), Gorenflo et al. (2007), Gorenflo et al. (2002a), Paradisi et al. (2001), Gorenflo and Mainardi (2001), Gorenflo et al. (2002c), Mainardi et al. (2006), Mainardi and Tomirotti (1997), Gorenflo et al. (1999), Gorenflo and Mainardi (1998b), Meerschaert et al. (2002), Ditlevsen (2004), Cushman and Moroni (2001), Moroni and Cushman (2001), Cushman et al. (2005), Roop (2006), Mainardi et al. (2007), Chen et al. (2010), Meerschaert and Sikorskii (2012), Odzijewicz et al. (2013), Uchaikin (2013a), Uchaikin (2013b), Uchaikin and Sibatov (2013), Gottwald and Melbourne (2016), Gulian et al. (2018), Zhou et al. (2016), Bonito et al. (2018), Berman and Cederbaum (2018), Nolan (2019), Wiseman et al. (2019), Buonocore et al. (2020), Ott et al. (1990), ben Avraham and Havlin (2000), Evans et al. (2017)

Fractional Laplacian Lischke et al. (2020), Bucur and Valdinoci (2016), Lischke et al. (2020), Suzuki et al. (2022), Vlahos et al. (2008), Dyda (2012), Di Nezza et al. (2012), Ros-Oton and Serra (2014)

Stable first passage times through random fracture networks, Hyman et al. (2019)

Turbulence: Kolmogorov (1941), Mandelbrot (1974), Mandelbrot (1976), Frisch et al. (1978), Helland and Van Atta (1978), Gupta and Waymire (1990), Mouri (2015), Yuan et al. (2018)

Fractional stable laws: Kolokoltsov et al. (2001), Bening et al. (2004), Bening and Korolev (2013)

2.9 Dynamical systems, ergodic theory, stochastic recurrence equations

Gouëzel (2004), Gouëzel (2007), Guivarc'h and Le Page (2008), Zweimüller (2003), Coates and Luzzatto (2024)

Stochastic recurrence equations: Kesten (1973), Mikosch et al. (2012).

2.10 Physics, astronomy and chemistry

Montroll and Shlesinger (1982), Metzler and Klafter (2000), Liu and Chen (1994), Strobl (1997), Boldyrev and Gwinn (2003), Bendler (1984), Freeman and Chisham (2005), Metzler and Klafter (2002), Metzler et al. (2007), Csörgő et al. (2004a), Csörgő et al. (2004b),Csörgő et al. (2005), Novák (2006a),Csorgo et al. (2006), Novák et al. (2007), Novák (2006b), Csörgő et al. (2008),Novák (2008), Novák et al. (2009), Peach (1981), Hetman et al. (2003), Lan (2001), Shlesinger (2001), Lan (2002), Metzler et al. (2014), Tommasi et al. (2019), Bulyak and Shul'ga (2019), Gao and Liu (2020), Kincses (2020), Kincses (2024), Csörgõ et al. (2024)

Cosmic ray modeling: Phan et al. (2021)

Fluctuation flux for plasma in a controlled fusion experiment are modeled by a stable law in Jha et al. (2003), Steinbrecher and Weyssow (2004), and Yanushkevichiene and Saenko (2013).

Photonics: Vynck et al. (2023)

The Kohlraush-Williams-Watts function - relaxed exponentials: Kohlrausch (1847), Williams and Watts (1970), Montroll and Bendler (1984), Shlesinger and Montroll (1984), Anderssen et al. (2004), Elton (2018). For multivariate isotropic stable laws, see Nolan (2013).

Laser cooling of atoms: Bardou et al. (2002)

Random lasers: Lin et al. (2018), Uppu and Mujumdar (2014), Tommaasi et al. (2016), Tommasi et al. (2019)

Lévy glass Barthelemy et al. (2008), Janzen et al. (2010) and Janzen et al. (2010).

The Landau distribution is used in physics to describe the fluctuations in the energy loss of a charged particle passing through a thin layer of matter. This distribution is a special case of the stable distribution with parameters $\alpha = 1$, and $\beta = 1$. It was originally discussed in Landau (1944), more information is in Leo (1994).

Polymer kinetics: Herrchen (2001).

Out-of-equilibrium systems: Campi and Bianconi (2019)

Turbulence: Takayasu (1984), Kida (1991), Miyaguchi and Aizawa (2001), Mouri (2015)

Superconductivity: Augello et al. (2010) and Valenti et al. (2014) give a computational analysis of the phase dynamics of short and long Josephson junctions in the presence of non-Gaussian (Lévy) noise sources (Resonant Activation, Noise Enhanced Stability and Soliton dynamics). Guarcello et al. (2016) analyze phase dynamics, i.e., focus on solitons, in long Josephson junctions, as a Lévy noise source is taken into account. Guarcello et al. (2017) study the effects of the Lévy noise on the switching currents of graphene-based Josephson junctions. See also Gattenlöhner et al. (2016) and Briskot et al. (2014)

Dattoli et al. (2014) use stable laws to describe photoluminescence decay of silicon nanocrystals.

Metrology: Douglas (2007), Hunt et al. (1995), Verdi (2014)

Solar flares: Lei et al. (2020)

2.11 Survival analysis, frailty, reliability

A clear introduction to the concept of frailty is Wienke (2003). The use of stable distributions in this way started with Hougaard (1986). More references and applications in Hougaard (2000), Singpurwalla (1995), Wassell et al. (1999), Qiou et al. (1999), Ravishanker and Dey (2000), Gjessing et al. (2003), Mallick and Ravishankaer (2004), Gaver et al. (2004), Hanagal (2011), Balan and Putter (2020).

Reliability testing: Gaver et al. (2004).

2.12 Embedding of Banach spaces

Johnson and Schechtman (1982), Ledoux and Talagrand (1991), Friedland and Guédon (2011), Wang and Woodruff (2022).

2.13 Geology and Geophysics

Tukey (1965) wrote "In general, as I am sure almost every geophysicist knows, distributions of actual errors and fluctuations have much more straggling extreme values than would correspond to the magic bell-shaped distribution of Gauss and Laplace." Painter et al. (1995), Gaynor et al. (2000), Painter (2001), Gunning (2002), Velis (2003), Molz et al. (2004), Sahimi and Tajer (2005). Marcus (1970), Li and Mustard (2000), Li and Mustard (2005), Rishmawi (2005), Zaliapin et al. (2005), Meerschaert et al. (2004), Hill and Tiedeman (2007), Sindirgi (2021), Sındırgı (2023)

Earthquake modeling: Lavallée and Archuleta (2003)

Magnetotelluric data: Chave (2014), Chave (2017).

2.14 Medicine, biology, genetics

West (1999), Salas-Gonzalez et al. (2009d), Crato et al. (2011).

Modeling cancer dynamics Durrett et al. (2011), Durrett (2013).

Sorace (2012) describes a long-tailed distribution of disease combinations in the U.S. Medicare system. In this setting, the idea it more of sparsity: rather than prominent clusters of combinations of diseases, there are many, many combinations of different illnesses that occur. This argues that the costs of medical care cannot be significantly lessened by focusing on a few common clusters of diseases.

Sassi (2009) uses stable laws to study heart beat rates. See also Lan and Toda (2013).

Lan and Chandran (2011) model fluctuations in animal population sizes. Segura et al. (2013) model fluctuations in microbial populations with log-stable distributions. They find heavy tails in the logarithms of ratios of successive population sizes. Harmful algae blooms can result when large fluctuations occur. Batt et al. (2017) discuss heavy tails and extreme events in ecosystem time series.

Zhang et al. (2021)

Saenko and Saenko (2015) propose using stable laws to model gene expression data.

Van den Heuvel et al. (2018) and Van den Heuvel et al. (2015) use stable laws to model proton beams in cancer treatment.

Di Gioacchino et al. (2019) uses stable laws to describe myelin protein dynamics.

Forest fires Malamud et al. (1998)

Nanopore modeling: Kotulska (2007).

Genetic regulatory networks: Ding et al. (2019).

Like a Lévy flight, epidemics may spread locally and then take a large jump to a different country: Brockmann and Hufnagel (2007), Linder et al. (2008), Boto and Stollenwerk (2009), Machado and Lopes (2020)

Long range dispersal: Smith and Weissman (2020)

Heavy tails in learning networks Costa et al. (2016), Zhou et al. (2018)

Cerebral cortex: Stringer et al. (2019), Liu et al. (2021)

2.15 Random trees

Duquesne and Le Gall (2002) relate random trees with nodes having offspring distribution that is heavy tailed. Beta-coalescents and continuous stable random trees Berestycki et al. (2007), Berestycki (2009).

2.16 Rainfall, hydrology, climatology

Modeling rainfall: Lovejoy (1982), Lovejoy and Mandelbrot (1985), Lovejoy and Schertzer (1986b), Gupta and Waymire (1990), Menabde and Sivapalan (2000), Millán et al. (2011), Gomi and Kuzuha (2013), Mahmoudi et al. (2021), Buriticá and Naveau (2021)

Hydrology: Guadagnini et al. (2013), Guadagnini et al. (2014), Guadagnini et al. (2015), Nan (2014), Nan et al. (2016), Zhang et al. (2018)

Climatology: Lavallée and Beltrami (2004)

2.17 Miscellaneous

Wrapped stable: SenGupta (1996), Jammalamadaka and SenGupta (2001), SenGupta and Pal (2001), Gatto and Jammalamadaka (2003), Pewsey (2008)

Tuerlinckx (2004) uses a positive stable law to model a multivariate counting model for response times in psychology.

Heinrich (1987) considers sums of ψ-mixing random variables and a connection with continued fractions. See also Hensley (2000), Finch (2007) and Heinrich et al. (2004), where a connection to rounding errors is made.

Farsad et al. (2016), Farsad et al. (2015), Farsad et al. (2018) use stable laws to model time synchronization in molecular timing channels.

Quality control: Naseri et al. (2020)

Multiple testing: Wilson (2019), Wilson (2020), Held (2020), Liu and Xie (2020), Wilson (2021), Chen (2022), Ling and Rho (2022), Ling (2022)

Maximum likelihood estimation on parameter domains with a boundary: Smith (1985).

2.18 Long tails in business, political science, etc.

These references are about extreme events, generally not situations where there is a numeric value that is being measured. There is not a direct probability distribution involved, but the idea of unusual/atypical occurrences can be important.

Anderson (2006) discusses the "Long Tail" occurring in sales, where many low volume items can account for significant revenue. The best known example of this is Amazon.com, where the lack of brick-and-mortar stores make it feasible to sell low volume goods on a large scale. Brynjolfsson et al. (2006) also discuss this.

King and Zeng (2001) discuss measuring rare events in international relations. The first author has a webpage on rare events at
`http://gking.harvard.edu/category/research-interests/methods/rare-events`.

Bremmer and Keat (2009) write about the fat tail in political and economic events. They do not measure a quantitative variable, rather they write about typical events that cluster around some center and occasionally there is an extreme event, like the 1998 financial crisis in Russia or the September 11, 2001 terrorists attacks on the U.S. These are bulges/bumps far from the normal events that happen. They argue that one should be thinking about these possible risky events.

3 Multivariate stable distributions

3.1 General references

Samorodnitsky and Taqqu (1994b), overview Nolan (1998a), in progress Nolan (2024)

Existence of spectral measures: Feldheim (1937), Lévy (1954), Courrège (1964)

Representation in L^α: Schreiber (1972), Bretagnolle et al. (1966)

3.2 Multivariate stable densities, cdf, simulation, etc.

Nolan and Rajput (1995), Abdul-Hamid (1996), Abdul-Hamid and Nolan (1998), Nolan (2005), Matsui and Takemura (2008b), Nolan (2013), Nolan (2023a), Nolan (2023b).

For exact simulation, see Modarres and Nolan (1994) for discrete spectral measures. Can also simulate radially symmetric and elliptically contoured using sub-Gaussianity, this is used in Nolan (2005). Sub-stable vectors can be simulated in the same way. And sums of any of the above are stable.

Approximating by sums: Davydov and Nagaev (2002a), Davydov and Nagaev (2002b). Approximating by a sum of Poisson and Brownian terms: Asmussen and Rosiński (2001), Cohen and Rosiński (2007), Cohen et al. (2010).

Tail behavior of multivariate stable laws: Hiraba (2003), Arkhipov (2003), Nagaev (2007), Watanabe (2007), Forsström and Steif (2020)

Support of stable and semi-stable laws: Port and Vitale (1988), Ashbaugh et al. (1992), Rajput (1993), Rajput (1994), Rajput et al. (1994), Rajput (1977b).

3.3 Multivariate estimation

General: Press (1972b), Rachev and Xin (1993), Cheng and Rachev (1995), Nolan et al. (2001), Nolan and Panorska (1997), Pivato and Seco (2003), Nolan (2005), Davydov and Paulauskas (1999b), Liu (2009), Ogata (2010), Nolan (2013), Mohammadi et al. (2014), Sathe and Upadhye (2019), Kabašinskas et al. (2021). U-statistics: Teimouri et al. (2017)

Elliptically contoured/sub-Gaussian stable: Omelchenko (2010), Nolan (2013)

Goodness-of-fit for multivariate stable: Meintanis (2016), Meintanis et al. (2015)

3.4 Conditional distributions and moments

Hardin (1982a), Cambanis and Wu (1992), Cioczek-Georges and Taqqu (1994a), Cioczek-Georges and Taqqu (1995a), Hardin et al. (1991a), Hardin et al. (1991b), Samorodnitsky and Taqqu (1994b), Gouriéroux and Zakoïan (2017), Fries (2018).

3.5 Dependence measures

Press (1972c), Paulauskas (1976), Cambanis and Miller (1981), Chapter 4 of Samorodnitsky and Taqqu (1994b), summary and proposed measures in Nolan (2001b), Boland et al. (2000), Levy. and Taqqu (2005), Samorodnitsky and Taqqu (1993), **?**, d'Estampes et al. (2002), Garel et al. (2004), Garel and Kodia (2009), Garel and Massé (2009), Garel and Kodia (2010), Belu (2012), Alparslan and Nolan (2016)

General tests for independence using the empirical distribution function: Hoeffding (1948b), Blum et al. (1961). Tests using the characteristic function: Csörgő (1985), Székely et al. (2007), Székely and Rizzo (2009).

3.6 Approximation and metrics

Byczkowski et al. (1993), Rachev (1991), Davydov and Paulauskas (1999b), Davydov and Nagaev (2002b), Nolan (2010)

3.7 Miscellaneous multivariate stable

Substable: Misiewicz and Takenaka (2002)

Sums of dependent heavy tailed random variables: Basrak et al. (2011), Bartkiewicz et al. (2011), Tyran-Kamińska (2010a,b,c).

Concentration of measure: Ledoux (2001), Houdré and Marchal (2004), Marchal (2005), Houdré et al. (2008), Houdré and Marchal (2008)

Connection between point processes and isotropic stable: Chatterjee et al. (2010), Hawat et al. (2023)

4 Regression

Barmi and Nelson (1997), McCulloch (1998a), Ojeda-Revah (2001), Nolan and Ojeda-Revah (2013), LePage et al. (1998), LePage and Podgórski (1996), Kurz-Kim et al. (2005), Paulauskas and Rachev (2003), Blattberg and Sargent (1971), Walls (2005), Preve (2015), Liu and Preve (2016), Riabiz et al. (2017a), Riabiz et al. (2017b), Jensen (2018), Vijverberg and Hasebe (2021).

Walls and McKenzie (2019) uses stable regression to analyze movie revenues using covariates and Rodriguez-Aguilar et al. (2019) predict Mexican electricity prices using regression.

Vector autoregression: Hannsgen (2008) discusses whether there are heavy tailed distributions involved in structural VAR used for policy analysis. The

presence of infinite variance makes the use of structural VAR questionable. A revision of this paper is available in Hannsgen (2012).

5 Time series

Cline and Brockwell (1985), Davis and Resnick (1986b), Durbin and Cordero (1993), Mikosch et al. (1995), Part II of Adler et al. (1998), Calder (1998), Qiou and Ravishanker (1998), Nolan and Ravishanker (2009), Resnick et al. (1999), Resnick et al. (2000a), Section 13.3 of Brockwell and Davis (1991), Andrews et al. (2009), Sousa et al. (2014), Kruczek et al. (2017), Riabiz and Godsill (2017), Riabiz et al. (2018), Lombardi and Godsill (2006b), Lemke and Godsill (2012), Lemke and Godsill (2014), Lemke et al. (2015), Godsill and Kuruoğlu (1999), Godsill (1999).

Sampaio and Morettin (2015), Grzesiek et al. (2019), Sathe and Upadhye (2019), Montillet et al. (2020), He et al. (2020), Giri et al. (2022), Sathe et al. (2023)

6 Stable processes

6.1 General references

Samorodnitsky and Taqqu (1994b), Janicki and Weron (1994), Sato (1999), Bogdan et al. (2009)

6.2 Stochastic integrals, series, minimal representations

LePage et al. (1981), Hardin (1982b), Samorodnitsky and Taqqu (1990c), Rosiński (1990b), Kwapień and Woyczyński (1992), Rosiński (1992), Samorodnitsky and Taqqu (1994b), Rosiński (1995), Rosiński (1995), Al-Khach (1997), Roy (2010)

Riabiz and Godsill (2017), Riabiz et al. (2017), Riabiz et al. (2018), Riabiz et al. (2017b), Riabiz et al. (2017a), Lemke and Godsill (2011), Lemke (2014), Lemke et al. (2015).

6.3 Path properties

McKean (1955), Blumenthal and Getoor (1960, 1962), Takeuchi (1964), Rosiński (1986), Rosiński (1989), Nolan (1988), Nolan (1989a), Nolan (1989b), Cambanis et al. (1990), Nolan (1991), Rosiński et al. (1991), Rosiński and Samorodnitsky (1993), Samorodnitsky (1988), Samorodnitsky (1993b), Adler (1990), Port (1990)

Reflection through a sphere: Bogdan and Zak (2006)

Hitting distributions and first passage times: Hunt (1958), Getoor (1961), Blumenthal et al. (1961), Hsu (1986), Kim et al. (2015), Kyprianou (2018), Devroye and Nolan (2024), Palyulin et al. (2019), Uchiyama (2016)

Laws of the iterated logarithm: Breiman (1968b), Mijnheer (1975), Oodaira (1973), Albin (1992), Dehling and Taqqu (1989b), Kôno (1983b), Monrad and Rootzén (1995), Taqqu (1977), Taqqu and Czado (1985b).

Level crossings. Gaussian case: Marcus (1977), Marcus and Shen (1997), Slud (1991), Slud (1992b), Slud (1992a). Stable case: Adler et al. (1993), Adler and Samorodnitsky (1997), Marcus (1989), Michna and Rychlik (1992a), Michna and Rychlik (1992b), Marcus and Shen (1998).

Maxima/extremes: Heyde (1969), Aleškevičienė (1990), Berman (1992), Molchan (2000), Samorodnitsky (2004b), Samorodnitsky (2004a), Kuznetsov (2011), Fougéres et al. (2009), Fougères et al. (2023), Melchers (2021), Melchers (2022)

6.4 Prediction

Cambanis and Soltani (1984), Cline and Brockwell (1985), Miamee and Pourahmadi (1988), Brockwell and Davis (1991), Kokoszka (1996), Mohammadi and Mohammadpour (2009)

6.5 Miscellaneous topics in stable processes

Self-similarity: there are several disjoint classes of self-similar stable processes. See Chapter 7 of Samorodnitsky and Taqqu (1994b). Beran (1986). A general review is Taqqu (1986a), Doukhan et al. (2003).

Long memory/long-range dependence: Taqqu (1986a), Beran (1992), Doukhan et al. (2003), Samorodnitsky (2006a)

Local nondeterminism and local times: Berman (1973), Berman (1974), Cuzick (1978), Cuzick (1987), Berman (1983), Berman (1987), Monrad and Pitt (1987), Berman (1991), Nolan (1989b), Soltani (1992), Shieh (1991), Shieh (1992), Xu (1995), Marcus and Rosen (2001), Khoshnevisan et al. (2006), Xiao (2006a), Ayache and Xiao (2016), Harang and Ling (2021), Ding et al. (2023)

Potential theory: Doob (1953), Blumenthal and Getoor (1968), Landkof (1972), Landkof (1973), Doob (1984), Eiderman (1997), Jakubowski (2002)

Ergodicity/mixing: Janicki and Weron (1994), Rosiński and Samorodnitsky (1996), Rosiński and Zak (1997)

Ornstein-Uhlenbeck processes: expressions for joint distribution by Wooster (2009)

Connections between continuous and discrete processes: Lee (2009).

6.6 Riesz α-capacity

Riesz (1938a), Blumenthal et al. (1961), Profeta and Simon (2016), Kyprianou (2018), Nolan et al. (2024)

Distance between randomly choosen points in a set: Moltchanov (2012), Aharonyan and Khalatyan (2020), anon (2023), citelellouche:souris:2020

7 Stable measures on vector spaces and groups

Hazod and Siebert (2001), Linde (1984), Linde (1986), Linde et al. (1980), Lewandowski et al. (1992), Lewandowski et al. (1995), Lewandowski and Żak (1987), Zak (1984), Zak (1989), Ryznar (1986).

8 Related distributions and processes, extensions of the notion of stability

Tempered stable distributions: Koponen (1995), Rosiński (2007), Terdik and Woyczyński (2006), Houdré and Kawai (2006), Houdré and Kawai (2007), Cohen and Rosiński (2007), Jurek (2007), Rosiński (2007), Grabchak (2008), Grabchak and Samorodnitsky (2010), Grabchak (2012), Kawai and Masu (2011), Dassios et al. (2018), Fallahgoul and Loeper (2019), Grabchak (2021), **?**

Geometric stable laws: Rachev and SenGupta (1991), Rachev and SenGupta (1993), Panorska (1996), Kozubowski (1994), Kozubowski (1995), Kozubowski and Rachev (1994),

Laplace distributions: Kotz et al. (2001)

Operator stable laws: if the scaling term a_n in the definition of joint stability is replaced by a matrix A_n, then a larger class of multivariate distributions results. One simple case is if the matrix is diagonal, say A_n =diag($n^{-1/\alpha_1}, n^{-1/\alpha_2}$, $\ldots, n^{-1/\alpha_d}$) with the joint distribution having independent components with the j-th coordinate being an α_j-stable r.v. These are called *marginally stable* laws. The general case is more complicated, see Jurek and Mason (1993), Cambanis and Taraporevala (1995), Meerschaert and Scheffler (2001a). Two dimensional case: Michaliček (1972b), Michaliček (1972a). Also Scheffler et al. (2020)

Operator stable-like processes: Scheffler et al. (2024)

Weakly stable vectors Mazurkiewicz (2007).

α-symmetric multivariate distributions of Cambanis et al. (1983), see Fang et al. (1990).

Tsilevich and Vershik (1999) consider $\alpha = 0$.

Davydov et al. (2007) and Davydov et al. (2008) have defined a general notion of stability on a cone K with some operation $+$, that generalizes sum stability and includes max-stability, min-stability, and more.

α-symmetric distributions: Cambanis et al. (1983), Chapter 7 of Fang et al. (1990).

Discrete stable laws: caused by digitization and truncation in signal processing, see Lee et al. (2005). Discrete distributions with some sort of stability property: Steutel and Van Harn (2004), Klebanov and Slámová (2012), Slámová and Klebanova (2012). Multivariate discrete stable distributions: Rao and Shanbhag (1994), pg. 160.

9 References

References

A. Oliveira, K., S. Unicomb, and J. Gleeson (2023, 05). Diffusion approximation of a network model of meme popularity. *Physical Review Research 5*.

Aban, I. B. and M. M. Meerschaert (2001). Shifted Hill's estimator for heavy tails. *Comm. Statist. Simulation Comput. 30*(4), 949–962.

Aban, I. B. and M. M. Meerschaert (2004). Generalized least-squares estimators for the thickness of heavy tails. *J. Statist. Plann. Inference 119*(2), 341–352.

Aban, I. B., M. M. Meerschaert, and A. K. Panorska (2006). Parameter estimation for the truncated Pareto distribution. *J. Amer. Statist. Assoc. 101*(473), 270–277.

Abdul-Hamid, H. (1996). *Approximation of multivariate stable densities*. Ph. D. thesis, American University.

Abdul-Hamid, H. and J. P. Nolan (1998). Multivariate stable densities as functions of one dimensional projections. *J. Multivar. Anal. 67*, 80–89.

Abraham, C., G. Biau, and B. Cadre (2003). Simple estimation of the mode of a multivariate density. *The Canadian Journal of Statistics / La Revue Canadienne de Statistique 31*(1), 23–34.

Abramowitz, M. (1954, 03). On the practical evaluation of integrals. *Journal of the Society of Industrial and Applied Mathematics 2*(1), 20–16.

Abramowitz, M. and I. A. Stegun (1972). *Handbook of Mathematical Functions* (Tenth Printing ed.). U.S. Government Printing Office.

Achcar, J., S. Lopes, J. Mazucheli, and R. Linhares (2013). A Bayesian approach for stable distributions: Some computational aspects. *Open Journal of Statistics 3*(4), 268–277. doi: 10.4236/ojs.2013.34031.

Achim, A. (2008). *Novel Bayesian Multiscale Methods For Image Denoising Using Alpha-Stable Distributions*. Ph.d. thesis, University of Patras, Patras, Greece.

Achim, A., A. Bezerianos, and P. Tsakalides (2001a). Novel Bayesian multiscale method for speckle removal in medical ultrasound images. *IEEE Trans. Med. Imaging 20*, 772–783.

Achim, A., A. Bezerianos, and P. Tsakalides (2001b). Wavelet-based ultrasound image denoising using an alpha-stable prior probability model. In *Proceedings 2001 International Conference on Image Processing (Cat. No.01CH37205)*, Volume 2, pp. 221–224 vol.2.

Achim, A., A. Bezerianos, and P. Tsakalides (2002). SAR image denoising: a multiscale robust statistical approach. *IEEE Proc. 14-th Intl. Conf. on Digital Signal Processing (DSP 2002), Santorini, Greece II*, 1235–1238.

Achim, A. and E. Kuruoğlu (2005). Image denoising using bivariate α-stable distributions in the complex wavelet domain. *IEEE Signal Processing Letters 12*(1), 17–20. cited By 82.

Achim, A., E. Kuruoğlu, and J. Zerubia (2006). SAR image filtering based on the heavy-tailed rayleigh model. *IEEE Transactions on Image Processing 15*(9), 2686–2693. cited By 74.

Achim, A., A. Loza, D. Bull, and N. Canagarajah (2008). *Image Fusion: Algorithms and Applications*, Chapter Statistical Modelling for Wavelet-Domain Image Fusion, pp. 119–138. Amsterdam: Academic Press.

Achim, A., P. Tsakalides, and A. Bezerianos (2003). SAR image denoising via Bayesian wavelet shrinkage based on heavy-tailed modeling. *IEEE Transactions on Geoscience and Remote Sensing 41*, 1773–1784.

Adelman, I. (1965). Long cycles: fact or artefact? *American Economic Review 55*, 444–463.

Adenstedt, R. (1974). On large-sample estimation for the mean of a stationary random sequence. *The Annals of Statistics 2*(6), 1095–1107.

Adler, R. (1990). *An introduction to continuity extrema and related topics for general Gaussian processes*. Hayward: Institute of Mathematical Statistics. Vol. 12.

Adler, R., S. Cambanis, and G. Samorodnitsky (1990). On stable Markov processes. *Stoch. Proc. Appl. 34*, 1–17.

Adler, R. and G. Samorodnitsky (1987). Tail behavior for the suprema of gaussian processes with a view towards empirical process. *The Annals of Probability 15*, 1339–1351.

Adler, R. J., R. Feldman, and M. Taqqu (1998). *A Practical Guide to Heavy Tailed Data*. Boston: Birkhäuser.

Adler, R. J. and G. Samorodnitsky (1993). Super fractional Brownian motion, fractional super Brownian motion and related self-similar (super) processes. *Annals of Probability 23*, 743–766.

Adler, R. J. and G. Samorodnitsky (1997). Level crossings of absolutely continuous stationary symmetric α-stable processes. *Annals of Applied Probability 7*, 460–493.

Adler, R. J., G. Samorodnitsky, and T. Gadrich (1993). The expected number of level crossings for stationary, harmonizable, symmetric, stable processes. *The Annals of Applied Probability 3*, 553–575.

Aghazadeh Ayoubi, R. and U. Spagnolini (2022, February). Performance of dense wireless networks in 5G and beyond using stochastic geometry. *arXiv e-prints*, arXiv:2202.10363.

Aharonyan, N. G. and V. Khalatyan (2020). Distribution of the distance between two random points in a body from R^n. *Journal of Contemporary Mathematical Analysis (Armenian Academy of Sciences) 55*(6), 329–334.

Ahlfors, L. (1979). *Complex Analysis* (3rd Ed. ed.). McGraw-Hill Book Co.

Ahmed, L., R. León, and F. Proschan (1978). Generalized association with applications in multivariate statistics. Technical Report, Florida State University.

Ahmed Bouzidi, D., B. Dehri, M. Besseghier, and I. Dayoub (2019, 10). Blind digital modulation classification for STBC-OFDM system in presence of CFO and channels estimation errors. *IET Communications 13*, 2827 – 2833.

Ai, X., G. Ni, and T. Zeng (2023). Color image restoration with mixed gaussian–cauchy noise and blur. *Computational and Applied Mathematics 42*, 347. https://doi.org/10.1007/s40314-023-02461-0.

Aït-Sahalia, Y. and J. Jacob (2007). Volatility estimators for discretely sampled Lévy processes. *Ann. Statist. 35*(1), 355–392.

Aït-Sahalia, Y. and J. Jacod (2008). Fisher's information for discretely sampled Lévy processes. *Econometrica 76*(4), 727–761.

Akahori, J. (1993). Some formulae for a new type of path-dependent option. Preprint, Tokio University.

Akgirav, V. and G. Booth (1988). The stable-law model of stock returns. *J. Bus. Econ. Stat. 6*, 51–57.

Akgiray, V. and C. Lamoureux (1989). Estimation of stable law parameters: a comparative study. *J. Bus. Econ. Stat 7*, 85–93.

Akinsete, A., F. Famoye, and C. Lee (2008). The beta-Pareto distribution. *Statistics 42*(6), 547–563.

Al-Khach, R. S. (1997). Espaces de Sobolev et régularité des temps locaux d'un processus strictement α-stable [Sobolev spaces and regularity of local times of a strictly α-stable process]. *C. R. Acad. Sci. Paris Sér. I Math. 324*(4), 447–452.

Alam, K. and K. Saxena (1982). Positive dependence in multivariate distributions. *Comm. Statist. A10*, 1183–1186.

Albin, J. (1992). On the general law of iterated logarithm with application to selfsimilar processes and to Gaussian processes in R^n and Hilbert space. *Stoch. Proc. and their Appl. 41*, 1–31.

Aleman, A., B. S. Rajput, and S. Richter (1994). On an extremal problem in H^p and prediction of p-stable processes $0 < p < 1$. In *Stochastic analysis on infinite-dimensional spaces (Baton Rouge, LA, 1994)*, Volume 310 of *Pitman Res. Notes Math. Ser.*, pp. 1–11. Longman Sci. Tech., Harlow.

Aleškevičienė, A. K. (1990). On the maximum of sums of random variables and the supremum for stable processes. In *Probability theory and mathematical statistics, Vol. I (Vilnius, 1989)*, pp. 35–51. Vilnius: "Mokslas".

Ali Ahmed, D., S. Petrovskii, and P. F. C. Tilles (2018, 05). The "Lévy or diffusion" controversy: How important is the movement pattern in the context of trapping? *Mathematics 6*.

Aljethi, R. A. and A. Kılıcman (2022). Financial applications on fractional Lévy stochastic processes. *Fractal and Fractional 6*(5).

Alparslan, T., R. Davis, J. P. Nolan, S. Resnick, and J. Zou (2016). PCA and ICA for stable distributions. In progress.

Alparslan, U. T. and J. P. Nolan (2016). A measure of dependence for stable distributions. *Extremes 19*(2), 303–323.

Alstott, J., E. Bullmore, and D. Plenz (2014, 01). powerlaw: A python package for analysis of heavy-tailed distributions. *PLOS ONE 9*(1), 1–11.

Améndola, C., C. Klüppelberg, S. Lauritzen, and N. Tran (2020). Conditional independence in max-linear Bayesian networks. On arXiv, to appear in Ann. Appl. Prob.

Amengual, D. and E. Sentana (2010). Inference in multivariate dynamic models with elliptical innovations. Mimeo.

Amiri, M. V. and H. Amindavar (2005). A new maximum a posteriori CFAR based on stability in sea clutter state-space model. *Proceedings of IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP 2005) 5*, 601–604.

Ammy-Driss, A. and M. Garcin (2022). Efficiency of the financial markets during the covid-19 crisis: Time-varying parameters of fractional stable dynamics. *Physica A: Statistical Mechanics and its Applications*, 128335.

Anagnostopoulos, C. (2020, 05). Edge-centric inferential modeling & analytics. *Journal of Network and Computer Applications*, 102696.

Anantharam, V. (1995). On the sojourn time of sessions at an ATM buffer with long-range dependent input traffic. Preprint.

Anderson, C. (2006). *The Long Tail: Why the Future of Business Is Selling Less of More*. NY, NY: Hyperion.

Anderson, J., N. Goyal, A. Nandi, and L. Rademacher (2015). Heavy-tailed independent component analysis. In *2015 IEEE 56th Annual Symposium on Foundations of Computer Science (FOCS)*, Los Alamitos, CA, USA, pp. 290–309. IEEE Computer Society.

Anderson, J. and L. Rademacher. Efficiency of the floating body as a robust measure of dispersion. In *Proceedings of the 2020 ACM-SIAM Symposium on Discrete Algorithms*, pp. 364–377.

Anderson, P. L. and M. M. Meerschaert (1997). Periodic moving averages of random variables with regularly varying tails. *Ann. Statist. 25*(2), 771–785.

Anderson, T. W. (1971). *The Statistical Analyis of Time Series*. Wiley and Sons.

Anderssen, R. S., S. A. Husain, and R. J. Loy (2004, August). The Kohlrausch function: properties and applications. *Australian New Zealand Industrial and Applied Mathematics Journal 45*(E), C800–C816.

Andrews, B., M. Calder, and R. Davis (2009). Maximum likelihood estimation for α-stable autoregressive processes. *Annals of Statistics 37*(4), 1946–1982.

Andrews, D. W. K. (2001). Testing when a parameter is on the boundary of the maintained hypothesis. *Econometrica 69*(3), 683–734.

Andrews, S. (1986). Flicker noise: parameter estimation and data analysis. Master's thesis, Cornell University. Masters thesis.

Andria, J. (2021). A computational proposal for a robust estimation of the pareto tail index: An application to emerging markets. *Applied Soft Computing*, 108048.

anon (2023). Distribution of distances between random points on spheres. Mathematics Stack Exchange. URL:https://math.stackexchange.com/q/4660566 (version: 2023-03-18).

Anorina, L. (1979a). A class of operator-stable distributions. *Limit theorems, random processes and their applications 230*, 22–35. In Russian.

Anorina, L. (1979b). Some properties of operator-stable distributions. *Dokl. Akad. Nauk UzSSR* (12), 3–5. In Russian.

Anorina, L. (1982). A property of operator-stable distributions. *Limit theorems for random processes and related problems* (190), 15–27. In Russian.

Anorina, L. (1983). Domains of attraction of component-wise stable distributions. *Izv. Akad. Nauk UzSSR Ser. Fiz.-Mat. Nauk* (1), 9–14. In Russian.

Antoniadis, A., A. Feuerverger, and P. Gonçalves (2006). Wavelet-based estimation for univariate stable laws. *Ann. Inst. Statist. Math. 58*(4), 779–807.

Ao, S. I., L. Gelman, D. W. L. Hukins, A. Hunter, and A. M. Korsunsky (Eds.) (2007). *Proceedings of the World Congress on Engineering, WCE 2007, London, UK, 2-4 July, 2007*, Lecture Notes in Engineering and Computer Science. Newswood Limited.

Araujo, A. and E. Giné (1980). *The Central Limit Theorem for Real and Banach Valued Random Variables*. NY: Wiley.

Arce, G. R. (2005). *Nonlinear Signal Processing*. Wiley, NY.

Arce, G. R., D. Otero, A. B. Ramirez, and J. L. Paredes (2010). Reconstruction of sparse signals from 1 dimensionality-reduced Cauchy random-projections. See IEEE (2010), pp. 4014–4017.

Arellano-Valle, R. B., H. W. Gómez, and F. A. Quintana (2005). Statistical inference for a general class of asymmetric distributions. *J. Statist. Plann. Inference 128*(2), 427–443.

Arendarczyk, M., T. J. Kozubowski, and A. K. Panorska (2018a). The joint distribution of the sum and maximum of dependent Pareto risks. *J. Multivariate Anal. 167*, 136–156.

Arendarczyk, M., T. J. Kozubowski, and A. K. Panorska (2018b). The joint distribution of the sum and the maximum of heterogeneous exponential random variables. *Statist. Probab. Lett. 139*, 10–19.

Arias-Calluari, K., F. Alonso-Marroquin, and M. S. Harré (2018, Jul). Closed-form solutions for the lévy-stable distribution. *Phys. Rev. E 98*, 012103.

Arima, S. and S. Zarei (2024). Robust Bayesian small area estimation using the sub-gaussian α-stable distribution for measurement error in covariates. *AStA Adv Stat Anal*. https://doi.org/10.1007/s10182-024-00493-3.

Arkhipov, S. (1989). The density's function asymptotic representation in the case of multidimensional strictly stable distributions. In V. Kalashnikov and V. Zolotarev (Eds.), *Lecture Notes in Math.*, Volume 1412, pp. 1–21. Springer.

Arkhipov, S. (2003). Expansions of the density of a stable random vector in the case of discrete spectral measure. In Russian.

Arnold, B. C. and P. L. Brockett (1992). On distributions whose component ratios are cauchy. *The American Statistician 46*, 25–26.

Arnold, B. C., E. Castillo, and J. M. Sarabia (2008). Multivariate distributions defined in terms of contours. *Journal of Statistical Planning and Inference 138*(12), 4158 – 4171.

Arrigoni, V., G. Masi, E. Mercanti, N. Bartolini, and S. Vyetrenko (2023). Stock shocks modelling and forecasting. In *2023 IEEE 43rd International Conference on Distributed Computing Systems Workshops (ICDCSW)*, pp. 67–72.

Asghari, M., M. Zareinejad, S. M. Rezaei, and H. Amindavar (2022). Ecf-music: An empirical characteristic function based direction of arrival (doa) estimation in the presence of impulsive noise. *Digital Signal Processing*, 103440.

Asghari, M., M. Zareinejad, S. M. Rezaei, and H. Amindavar (2023). Robust matched field processing using an empirical characteristic function approach under impulsive noise environments. *Acoustics Australia*.

Ashbaugh, M., B. S. Rajput, K. Rama-Murthy, and C. Sundberg (1992). Remarks on the positivity of densities of stable laws. *Probability and Mathematical Statistics 13*(1), 77–86.

Asimov, D. (1985). The grand tour: a tool for viewing multidimensional data. *SIAM J. Sci. Statist. Comput. 6*(1), 128–143.

Asmussen, S. (2022, April). Remarks on Lévy process simulation. *SSRN*. https://ssrn.com/abstract=4129877.

Asmussen, S. and J. Rosiński (2001). Approximations of small jumps of Lévy processes with a view towards simulation. *Journal of Applied Probability 38*(2), 482–493.

Asmussen, S., H. Schmidli, and V. Schmidt (1997). Tail probabilities for non–standard risk and queueing processes with subexponential jumps. *Advances in Applied Probability*, to appear.

Astola, J. and Y. Neuvo (1992). Matched median filtering. *IEEE Trans. on Communication 40*(4), 722–729.

Astrauskas, A. (1982). Stable self-similar fields. *Lithuanian Mathematical Journal 22*(3), 215–221. Translated from *Litovskii Matematicheskii Sbornik* (*Lieutuvos Matematikos Rinkinys*).

Astrauskas, A. (1983a). Limit theorems for quadratic forms of linear processes. *Lithuanian Mathematical Journal 23*(4), 355–361.

Astrauskas, A. (1983b). Limit theorems for sums of linearly generated random variables. *Lithuanian Mathematical Journal 23*(2), 127–134. Translated from *Litovskii Matematicheskii Sbornik* (*Lieutuvos Matematikos Rinkinys*).

Astrauskas, A., J. Levy, and M. S. Taqqu (1991). The asymptotic dependence structure of the linear fractional Lévy motion. *Lietuvos Matematikos Rinkinys (Lithuanian Mathematical Journal) 31*(1), 1–28.

Augello, G., D. Valenti, and B. Spagnolo (2010). Non-Gaussian noise effects in the dynamics of a short overdamped Josephson junction. *The European Physical Journal B 78*(2), 225–234.

Austin, D., M. I. Español, and M. Pasha (2022). The image deblurring problem: Matrices, wavelets, and multilevel methods. https://arxiv.org/abs/2201.09831.

Avis, D. (2000a). *Lecture Notes in Computer Science*, Volume 1763, Chapter Living with lrs, pp. 47–56. Springer.

Avis, D. (2000b). *Polytopes - Combinatorics and Computation*, Volume 29 of *DMV Seminar*, Chapter lrs: A Revised Implementation of the Reverse Search Vertex Enumeration Algorithm, pp. 177–198. Birkhauser-Verlag.

Avram, F. (1987). Convergence to the gaussian distribution by graph methods. Preprint.

Avram, F. (1989). Asymptotics of sums with dependent indices and convergence to the Gaussian distribution. Preprint.

Avram, F. and L. Brown (1987). A generalized Holder inequality and a generalized Szego theorem. Preprint.

Avram, F. and M. S. Taqqu (1986a). Different scaling for finite i.i.d. arrays. Preprint.

Avram, F. and M. S. Taqqu (1986b). Symmetric polynomials of random variables attracted to an infinitely divisible law. *Probab. Th. Rel. Fields 71*, 491–500.

Avram, F. and M. S. Taqqu (1986c). Weak convergence of moving averages with infinite variance. In E. Eberlein and M. S. Taqqu (Eds.), *Dependence in Probability and Statistics*, pp. 399–415. Boston: Birkhauser.

Avram, F. and M. S. Taqqu (1987). Noncentral limit theorems and Appell polynomials. *The Annals of Probability 15*, 767–775.

Avram, F. and M. S. Taqqu (1989). Probability bounds for M-Skorohod oscillations. *Stochastic Processes and their Applications 33*, 63–72.

Avram, F. and M. S. Taqqu (1992). Weak convergence of sums of moving averages in the α -stable domain of attraction. *The Annals of Probability 20*, 483–503.

Ayache, A. (2004). Hausdorff dimension of the graph of the fractional Brownian sheet. *Rev. Mat. Iberoamericana 20*(2), 395–412.

Ayache, A. (2020). Lower bound for local oscillations of hermite processes. *Stochastic Processes and their Applications 130*(8), 4593–4607.

Ayache, A., F. Roueff, and Y. Xiao (2007a). Joint continuity of the local times of linear fractional stable sheets. *C. R. Math. Acad. Sci. Paris 344*(10), 635–640.

Ayache, A., F. Roueff, and Y. Xiao (2007b). Local and asymptotic properties of linear fractional stable sheets. *C. R. Math. Acad. Sci. Paris 344*(6), 389–394.

Ayache, A., N.-R. Shieh, and Y. Xiao (2019). Wavelet series representation and geometric properties of harmonizable fractional stable sheets. *Stochastics tbd*, 1–23.

Ayache, A. and Y. Xiao (2016). Harmonizable fractional stable fields: Local nondeterminism and joint continuity of the local times. *Stochastic Processes and their Applications 126*(1), 171 – 185.

Ayenu-Prah, A. Y. and N. O. Attoh-Okine (2009). Comparative study of Hilbert-Huang transform, Fourier transform and wavelet transform in pavement profile analysis. *Vehicle System Dynamics 47*(4), 437–456.

Aysal, T. C. (2007). *Filtering and estimation theory first-order, polynomial and decentralized signal processing*. Ph. D. thesis, University of Delaware.

Azzaoui, N. and L. Clavier (2007). An impulse response model for the 60 GHz channel based on spectral techniques of alpha-stable processes. In *IEEE International Conference on Communications, ICC 2007*, pp. 5040–5045.

Azzaoui, N. and L. Clavier (2010). Statistical channel model based on alpha-stable random processes and application to the 60 GHz ultra wide band channel. *IEEE Transactions on Communications To appear*.

Azzaoui, N., L. Clavier, and R. Sabre (2003). Path delay model based on α-stable distribution for the 60 GHz indoor channel. In *IEEE Global Telecommunications Conference, GLOBECOM 2003*, pp. 1638–1643.

Bañuelos, R. and K. Bogdan (2004). Symmetric stable processes in cones. *Potential Analysis 21*, 263–288. https://doi.org/10.1023/B:POTA.0000033333.72236.dc.

Babić, S., C. Ley, L. Ricci, and D. Veredas (2020). TailCoR. *Preprint*.

Babić, S., C. Ley, and D. Veredas (2019, Sep). Comparison and classification of flexible distributions for multivariate skew and heavy-tailed data. *Symmetry 11*(10).

Baccelli, F. and P. Brémaud (1994). *Elements of Queueing Theory. Palm–Martingale Calculus and Stochastic Recurrences*. Berlin: Springer–Verlag.

Bachelier, L. (1900). Théorie de la spéculation. *Annales Scientifiques de l'Ecole Normale Supérieure III-17*, 21–86. Translated in *The random character of stock market prices*, Ed. P.H. Cootner, pp. 17–78, Cambridge, MIT Press, 1964.

Baddeley, A., P. J. Diggle, A. Hardegen, T. Lawrence, R. K. Milne, and G. Nair (2014). On tests of spatial pattern based on simulation envelopes. *Ecological Monographs 84*(3), 477–489.

Baddour, N. (2009, Aug). Operational and convolution properties of two-dimensional fourier transforms in polar coordinates. *J. Opt. Soc. Am. A 26*(8), 1767–1777.

Badrikian, A. and S. Chevet (1974). Measures cylindriques, espaces de Wiener et fonctions aléatoires gaussiennes. In *Lecture Notes in Math.,* vol. *379*, Berlin and New York. Springer-Verlag.

Baeumer, B., M. Kovacs, and M. M. Meerschaert (2007). Fractional reproduction-dispersal equations and heavy tail dispersal kernels. *Bull. Math. Biol. 69*(7), 2281–2297.

Baeumer, B. and M. M. Meerschaert (2001). Stochastic solutions for fractional Cauchy problems. *Fract. Calc. Appl. Anal. 4*(4), 481–500.

Bai, Y., J. L. Speyer, and M. Idan (2019). Properties of the characteristic function generator of the two-state Cauchy estimator. *SIAM Journal on Control and Optimization 57*(6), 3639–3665.

Bai, Z. D. and J. C. Fu (1987). On the maximum-likelihood estimator for the location parameter of a Cauchy distribution. *The Canadian Journal of Statistics / La Revue Canadienne de Statistique 15*(2), pp. 137–146.

Baker, C. (1973). Zero-one laws for Gaussian measures on Banach spaces. *Transactions of the American Mathematical Society 186*, 291–308.

Bakhshizadeh, M., A. Maleki, and V. H. de la Pena (2020, March). Sharp concentration results for heavy-tailed distributions. *arXiv e-prints*, arXiv:2003.13819.

Balakrishna, N. and G. Hareesh (2009). Statistical signal extraction using stable processes. *Statistics and Probability Letters 79*(7), 851 – 856.

Balan, T. A. and H. Putter (2020). A tutorial on frailty models. *Statistical methods in medical research 29*(11), 3424–3454. DOI: 10.1177/0962280220921889.

Baldoni, V., N. Berline, J. A. De Loera, M. Köppe, and M. Vergne (2011). How to integrate a polynomial over a simplex. *Mathematics of Computation 80*(273), 297–325.

Balkema, A. and L. de Haan (1988). Almost sure continuity of stable moving averages processes with index ¡1. *The Annals of Probability 16*, 333–343.

Balkema, A. A. and S. I. Resnick (1977). Max-infinite divisibility. *Journal of Applied Probability 14*(2), pp. 309–319.

Balkema, G. and N. Nolde (2010). Asymptotic independence for unimodal densities. *Adv. in Appl. Probab. 42*(2), 411–432.

Banerjee, A., P. Burlina, and R. Chellappa (1999). Adaptive target detection in foliage-penetrating SAR images using alpha-stable models. *IEEE Transactions on Image Processing 8*(12), 1823–1831.

Barabási, A.-L. and R. Albert (1999). Emergence of scaling in random networks. *Science 286*(5439), 509–512.

Baraniuk, R., M. A. Davenport, and M. B. Wakin (2006). Detection and estimation with compressive measurements.

Barazideh, R., S. Niknam, and B. Natarajan (2019, Jan). Impulsive Noise Detection in OFDM-based Systems: A Deep Learning Perspective. *arXiv e-prints*, arXiv:1901.00447.

Bardet, J.-M. (2002). Bivariate occupation measure dimension of multidimensional processes. *Stochastic Process. Appl. 99*(2), 323–348.

Bardou, F., J.-P. Bouchaud, A. Aspect, and C. Cohen-Tannoudji (2002). *Lévy Statistics and Laser Cooling: How Rare Events Bring Atoms to Rest*. Cambridge: Cambridge Univ. Press.

Bargigli, L., A. Caiani, L. Riccetti, and A. Russo (2016, 10). *A Simple Model of Business Fluctuations with Heterogeneous Interacting Agents and Credit Networks*, pp. 29–102. Chapter 4 is on heavy-tailed distributions.

Barker, A. (2018, Jun). Transience and Recurrence of Markov Processes with Constrained Local Time. *arXiv e-prints*, arXiv:1806.05965.

Barker, A. W. (2014, May). Estimation of stable distribution parameters from a dependent sample. *ArXiv e-prints*.

Barker, A. W. (2015, July). *Log quantile differences and the temporal aggregation of alpha-stable moving average processes*. PhD thesis, Macquarie University, Department of Statistics.

Barman, K. and N. S. Upadhye (2020, August). Stein's Method for Tempered Stable Distributions. *arXiv e-prints*, arXiv:2008.05818.

Barmi, H. E. and P. I. Nelson (1997). Inference from stable distributions. *Lecture Notes-Monograph Series 32*, 439–456.

Barndorff-Nielsen, O. (1994). Gaussian Inverse Gaussian processes and the modelling of stock returns. Technical report, Aarhus University.

Barndorff-Nielsen, O. E., T. Mikosch, and S. I. Resnick (2001). *Lévy Processes: Theory and Applications*. Boston: Birkhäuser.

Barnett, V. D. (1966a). Evaluation of the maximum-likelihood estimator where the likelihood equation has multiple roots. *Biometrika 53*, 151–165.

Barnett, V. D. (1966b). Order statistics estimators of the location of the Cauchy distribution. *J. Amer. Statist. Assoc. 61*, 1205–1218. Correction in JASA Vol. 63, 383-385.

Barrera, G. (2021). Cutoff phenomenon for the maximum of a sampling of ornstein–uhlenbeck processes. *Statistics & Probability Letters 168*, 108954.

Barrera, G. and J. Carlos Pardo (2020). Cut-off phenomenon for ornstein-uhlenbeck processes driven by lévy processes. *Electron. J. Probab. 25*, 33 pp.

Bartels, R. (1977a). Estimation in a first order autoregressive scheme with non-normal stable disturbances. *Journal of Statistical Computation and Simulation 6*, 35–48.

Bartels, R. (1977b). On the use of limit theorem arguments in economic statistics. *American Statistician 31*, 85–87.

Bartels, R. (1978). Generating non-normal stable variables using limit theorem properties. *Journal of Statistical Computation and Simulation 9*, 199–212.

Bartels, R. (1979). Fractiles for the non-symmetric stable distributions. *Journal of Statistical Computation and Simulation 9*, 127–132.

Bartels, R. (1981). Truncation bounds for infinite expansions for the stable distributions. *Journal of Statistical Computation and Simulation 12*, 293–302.

Bartels, R. and J. Goodhew (1981). The robustness of the durbin-watson test. *Review of Economics and Statistics 63*, 136–139.

Barthelemy, P., J. Bertolotti, and D. S. Wiersma (2008). A Lévy flight for light. *Nature 453*, 495–498. Supplementary information available.

Bartkiewicz, K., A. Jakubowski, T. Mikosch, and O. Wintenberger (2011). Stable limits for sums of dependent infinite variance random variables. *Probability Theory and Related Fields 150*, 337–372.

Bartle, R. (1956). A general bilinear vector integral. *Studia Math. 15*, 337–352.

Barton, R. J. and H. V. Poor (1987). Signal detection in fractional Gaussian noise-part I: deterministic signals. Preprint.

Bartumeus, F., F. Peters, S. Pueyo, C. Marrasé, and J. Catalan (2003). Helical lévy walks: Adjusting searching statistics to resource availability in microzooplankton. *Proceedings of the National Academy of Sciences 100*(22), 12771–12775.

Basdevant, A.-L. and A. Singh (2008). Rate of growth of a transient cookie random walk. *Electron. J. Probab. 13*, no. 26, 811–851.

Basrak, B., D. Krizmanić, and J. Segers (2011). A functional limit theorem for partial sums of dependent random variables with infinite variance. *Annals of Probability In press.* http://arxiv.org/abs/1001.1345.

Basrak, B., D. Krizmanić, and J. Segers (2012). A functional limit theorem for dependent sequences with infinite variance stable limits. *Ann. Probab. 40*(5), 2008–2033.

Basse-O'Connor, A. and S.-E. Graversen (2010). Path and semimartingale properties of chaos processes. *Stochastic Process. Appl. 120*(4), 522–540.

Basterfield, D., T. Bundt, and G. Murphy (2003). The stable Paretian hypothesis and the Asian currency crisis. Technical report, Oregon Graduate Institute.

Basterfield, D., T. Bundt, and G. Murphy (2005a). Risk management and the Asian currency crisis: backtesting stable Paretian value-at-risk. Technical report, Hillsdale College, Department of Economics and Business Administration.

Basterfield, D., T. Bundt, and G. Murphy (2005b). Unconditional stable distributions vs. GARCH: backtesting value at risk during the Asian currency crisis. Technical report, Hillsdale College, Department of Economics and Business Administration.

Basu, B. and V. Pakrashi (2018). Parameter estimates of alpha-stable distribution and hurst coefficients. *Journal of Environmental Engineering and Science 13*(3), 53–72.

Bates, D. M. and D. G. Watts (1988). *Nonlinear regression analysis and its applications*. Wiley Series in Probability and Mathematical Statistics: Applied Probability and Statistics. New York: John Wiley & Sons Inc.

Batt, R. D., S. R. Carpenter, and A. R. Ives (2017). Extreme events in lake ecosystem time series. *Limnology and Oceanography Letters 2*(3), 63–69.

Bawa, V. J., E. J. Elton, and M. J. Gruber (1979). Simple rules for portfolio selection in stable paretian markets. *Finance 34*(4), 1041–1047.

Bazzi, A., A. Zanella, G. Cecchini, and B. M. Masini (2019). Analytical investigation of two benchmark resource allocation algorithms for LTE-V2V. *IEEE Transactions on Vehicular Technology*, 1–1.

Beatson, R. K. and W. z. Castell (2018, January). Thinplate Splines on the Sphere. *ArXiv e-prints*.

Beaulieu, M., J.-M. Doufur, and L. Khalaf (2005, November). Exact multivariate tests of asset pricing models with stable asymmetric distributions. Preprint, BundesBank November 2005 Conference.

Beaulieu, M.-C., J.-M. Dufour, and L. Khalaf (2014). Exact confidence sets and goodness-of-fit methods for stable distributions. *Journal of Econometrics 181*(1), 3 – 14.

Becker, R., J. Chambers, and A. Wilks (1988). *The New S Language*. Pacific Grove, Calif.: Wadsworth.

Bedford, T. and R. M. Cooke (2002). Vines—a new graphical model for dependent random variables. *Ann. Statist. 30*(4), 1031–1068.

Bee, M. and L. Trapin (2018, 05). A characteristic function-based approach to approximate maximum likelihood estimation. *Communication in Statistics-Theory and Methods 47*, 3138–3160.

Beirlant, J., I. F. Alves, and I. Gomes (2016). Tail fitting for truncated and non-truncated pareto-type distributions. *Extremes 19*, 429–462. https://doi.org/10.1007/s10687-016-0247-3.

Beirlant, J. and L. Devroye (1999). On the impossibility of estimating densities in the extreme tail. *Statist. Probab. Lett. 43*(1), 57–64.

Beirlant, J., U. Goegebeur, J. Segers, and J. L. Teugels (2004). *Statistics of Extremes: Theory and Applications*. Wiley Series in Probability and Statistics. Wiley.

Beirlant, J., P. Vynckier, and J. L. Teugels (1996). Tail index estimation, Pareto quantile plots and regression diagnostics. *JASA 91*, 1659–1667.

Belinskiy, B. P. and T. J. Kozubowski (2000). Exponential mixture representation of geometric stable densities. *J. Math. Anal. Appl. 246*(2), 465–479.

Belkacem, L. (1997). How to Select Optimal Portfolio in Alpha-Stable Markets. Research Report RR-3100, INRIA. Projet FRACTALES.

Belkacem, L., J. L. Véhel, and C. Walter (1995). Generalized market equilibrium: "stable" capm. In *AFFI - International Conference of Finance*, Bordeaux, France. https://www.hal.inserm.fr/INRIA/inria-00592310.

Belkacem, L., J. L. Véhel, and C. Walter (2000). Capm, risk and portfolio selection in alpha-stable markets. *Fractals 8*, 99–115.

Belkacemi, H. and S. Marcosa (2007). Robust subspace-based algorithms for joint angle/doppler estimation in non-Gaussian clutter. *Signal Processing 87*(7), 1547–1558.

Belomestny, D. (2010). Spectral estimation of the fractional order of a Lévy process. *Ann. Statist. 38*(1), 317–351.

Belovas, I., L. Sakalauskas, V. Starikovičius, and E. W. Sun (2021). Mixed-stable models: An application to high-frequency financial data. *Entropy 23*(6).

Belu, A. C. (2012). *Multivariate measures of dependence for random variables and Lévy processes.* Ph. D. thesis, Case Western Reserve. `https://etd.ohiolink.edu/apexprod/rws_etd/send_file/send?accession=case1333396376`.

Belyaev, K. (1961). Continuity and Hölder's conditions for sample functions of stationary gaussian processes. In *Proceedings 4th Berkeley Sympos. Math. Statist. and Prob.*, pp. 23–33. University of California Press. Volume 2.

Belzile, L., C. Dutang, P. Northrop, and T. Opitz (2023). A modeler's guide to extreme value software. *Extremes 26*, 595–638. https://doi.org/10.1007/s10687-023-00475-9.

ben Avraham, D. and S. Havlin (2000). *Diffusion and Reactions in Fractals and Disordered Systems.* Cambridge: Cambridge Univ. Press.

Bendler, J. T. (1984). Lévy (stable) probability densities and mechanical relaxation in solid polymers. *J. Statist. Phys. 36*(5–6), 625–637.

Bening, V. E. and V. Y. Korolev (2013). Statistical estimation of parameters of fractionally stable distributions. *J. Math. Sci. (N. Y.) 189*(6), 899–902.

Bening, V. E., V. Y. Korolev, V. N. Kolokol˜tsov, V. V. Saenko, V. V. Uchaikin, and V. M. Zolotarev (2004). Estimation of parameters of fractional stable distributions. *J. Math. Sci. (N. Y.) 123*(1), 3722–3732.

Benson, D. A., D. Bolster, S. Pankavich, and M. J. Schmidt (2020). Nonparametric, data-based kernel interpolation for particle-tracking simulations and kernel density estimation.

Benson, D. A., R. Schumer, M. M. Meerschaert, and S. W. Wheatcraft (2001). Fractional dispersion, Lévy motion, and the MADE tracer tests. *Transp. Porous Media 42*(1–2), 211–240.

Benth, F. E., J. Šaltytė Benth, and S. Koekebakker (2008). *Stochastic modelling of electricity and related markets.* Advanced Series on Statistical Science & Applied Probability, 11. World Scientific Publishing Co. Pte. Ltd., Hackensack, NJ.

Bentkus, V., F. Götze, and V. I. Paulauskas (1996). Bounds for the accuracy of Poissonian approximations of stable laws. *Stochastic Process. Appl. 65*(1), 55–68.

Bentkus, V., A. Juozulynas, and V. I. Paulauskas (2000). Bounds for stable measures of convex shells and stable approximations. *Ann. Probab. 28*(3), 1280–1300.

Bentkus, V., A. Juozulynas, and V. I. Paulauskas (2001). Lévy-LePage series representation of stable vectors: convergence in variation. *J. Theoret. Probab. 14*(4), 949–978.

Bentkus, V. and D. Surgailis (1981). On some classes of self-similar random fields. *Lithuanian Mat. Journal 21*(2), 53–66.

Beran, J. (1986). *Estimation, testing and prediction for self-similar and related processes*. Ph. D. thesis, Swiss Federal Institute of Technology, Zurich, Zurich, Switzerland. ETH Nr. 8074.

Beran, J. (1989). A test of location for data with slowly decaying serial correlations. *Biometrika 76*, 261–269.

Beran, J. (1990). Recent developments in location estimation and regression for long-memory processes. Preprint.

Beran, J. (1992). Statistical methods for data with long-range dependence. *Statistical Science 7*(4), 404–416. With discussions and rejoinder, pages 404-427.

Beran, J. and H. Kunsch (1985). Location estimators for processes with long-range dependence. Preprint.

Beran, J., R. Sherman, W. Willinger, and M. Taqqu (1995). Long-range dependence in variable-bit-rate video traffic. *IEEE Transactions on Communications 43*, 1566–1579.

Berestycki, J., N. Berestycki, and J. Schweinsberg (2007). Beta-coalescents and continuous stable random trees. *Ann. Probab. 35*(5), 1835–1887.

Berestycki, N. (2009). *Recent progress in coalescent theory*, Volume 16 of *Ensaios Matemáticos [Mathematical Surveys]*. Sociedade Brasileira de Matemática, Rio de Janeiro.

Bergh, C. (1986). The cube of a normal distribution is indeterminate. Preprint.

Bergsma, W. and A. Dassios (2014). A consistent test of independence based on a sign covariance related to kendall's tau. *Bernoulli 20*(2), 1006–1028.

Bergström, H. (1952). On some expansions of stable distributions. *Arkiv für Matematik 2*, 375–378.

Berkes, I. and L. Horváth (2012). The central limit theorems for sums of trimmed variables with heavy tails. *Stochastic Processes and their Applications 122*, 449–465.

Berkes, I. and W. Philipp (1998). Limit theorems for mixing sequences without rate assumptions. *Ann. Probab. 26*(2), 805–831.

Berman, M. and L. S. Cederbaum (2018). Fractional driven-damped oscillator and its general closed form exact solution. *Physica A: Statistical Mechanics and its Applications 505*, 744 – 762.

Berman, S. (1978). A new kind of tightness of probability measures and its applications to integral functionals of stochastic processes. *Zeitschrift für Wahrscheinlichkeitstheorie und verwandte Gebiete 42*, 155–162.

Berman, S. (1979). High level sojourns for strongly dependent Gaussian processes. *Zeitschrift für Wahrscheinlichkeitstheorie und verwandte Gebiete 50*, 223–236.

Berman, S. (1984). Sojourns of vector Gaussian processes inside and outside spheres. *Zeitschrift für Wahrscheinlichkeitstheorie und verwandte Gebiete 66*, 529–542.

Berman, S. (1986). The supremum of a process with stationary, independent and symmetric increments. *Stoch. Proc. Appl. 23*, 281–290.

Berman, S. (1992). *Sojourns and Extremes of Stochastic Processes*. Pacific Grove, CA: Wadsworth and Brooks/Cole.

Berman, S. M. (1973). Local nondeterminism and local times of Gaussian processes. *Bull. Amer. Math. Soc. 79*, 475–477.

Berman, S. M. (1974). Local nondeterminism and local times of Gaussian processes. *Indiana Univ. Math. J. 23*, 69–94.

Berman, S. M. (1983). Local nondeterminism and local times of general stochastic processes. *Ann. Inst. H. Poincaré Sect. B (N.S.) 19*(2), 189–207.

Berman, S. M. (1987). Spectral conditions for local nondeterminism. *Stochastic Process. Appl. 27*(1), 73–84.

Berman, S. M. (1991). Self-intersections and local nondeterminism of Gaussian processes. *Ann. Probab. 19*(1), 160–191.

Bernardi, M. and R. Casarin (2008). Bayesian inference for α-stable mixtures. doi=10.1.1.172.4823.

Berntsen, J. and T. O. Espelid (1992). Algorithm 706: DCUTRI: An algorithm for adaptive cubature over a collection of triangles. *ACM Trans. on Math. Software 18*, 329–342. Correction ACM Trans. on Math. Software, 24,334-335 (1998).

Bertoin, J. (1996). *Lévy Processes*. Cambridge: Cambridge University Press.

Bertoin, J. and R. Doney (1993). Some asymptotic results for transient random walks. Technical Report No. 93/1, Statistical Laboratory, Department of Mathematics, University of Manchester.

Besbeas, P. and B. J. T. Morgan (2008). Improved estimation of the stable laws. *Statistics and Computing 18*(2), 219–231.

Besson, O. and Y. I. Abramovich (2013, November). On the Fisher information matrix for multivariate elliptically contoured distributions. *IEEE Signal Processing Letters 20*(11), 1130–1133.

Betsakos, D. (2008). Some properties of α-harmonic measure. *Colloquium Mathematicae 111*(2), 297–314.

Betz, C. and H. Gzyl (1994). Hitting spheres from the exterior. *The Annals of Probability 22*(1), 177–179.

Bhandari, P., N. S Upadhye, and D. Pradhan (2023). Forecasting of financial time series data possessing stable distributions by employing stochastic differential equations: A review. In *2023 IEEE Pune Section International Conference (PuneCon)*, pp. 1–6.

Bhansali, R. (1993). Estimation of the impulse response coefficients of a linear process with infinite variance. *Journal of Multivariate Analysis 45*(2), 274–290.

Bhaskar, H., L. Mihaylova, and A. Achim (2008). Automatic object detection based on adaptive background subtraction using alpha-stable distributions. In *Proc. of the Institution of Engineering and Technology (IET) Seminar on Target Tracking and Data Fusion: Algorithms and Applications*, Birmingham, UK, pp. 197–203.

Bhaskar, H., L. Mihaylova, and A. Achim (2010). Video foreground detection based on symmetric alpha-stable mixture models. *IEEE Transactions on Circuits and Systems for Video Technology in*(press).

Bhatt, A., B. Rajput, and J. Xiong (2004). Zakai equation of nonlinear filtering with Ornstein-Uhlenbeck noise: existence and uniqueness. In *Stochastic processes and functional analysis*, Volume 238 of *Lecture Notes in Pure and Appl. Math.*, pp. 67–79. Dekker, New York.

Bhattacharya, R., V. Gupta, and E. Waymire (1983). The Hurst effect under trends. *Journal Appl. Probab. 20*, 649–662.

Biard, R., C. Lefévre, and S. Loisel (2008). Impact of correlation crises in risk theory: Asymptotics of finite-time ruin probabilities for heavy-tailed claim amounts when some independence and stationarity assumptions are relaxed. *Insurance: Mathematics and Economics 43*(3), 412 – 421.

Bibalan, M. H., H. Amindavar, and M. Amirmazlaghani (2017). Characteristic function based parameter estimation of skewed alpha-stable distribution: An analytical approach. *Signal Processing 130*, 323–336.

Bidarkota, P. V. (1999). Sectoral investigation of asymmetries in the conditional mean dynamics of the real U.S. GDP. *Studies in Non-Linear Dynamics and Econometrics 3*(4).

Bidarkota, P. V. (2000). Asymmetries in the conditional mean dynamics of real GNP: Robust evidence. *The Review of Economics and Statistics 82*(1).

Bidarkota, P. V. (2001). Alternative regime switching models for forecasting inflation. *Journal of Forecasting 20*.

Bidarkota, P. V. (2003). Do fluctuations in U.S. inflation rates reflect infrequent large shocks or frequent small shocks? *The Review of Economics and Statistics 85*(3).

Bidarkota, P. V. (2004). A comparison of two alternative approaches to modeling level shifts in the presence of outliers. *Communications in Statistics: Simulation and Computation 33*(3).

Bidarkota, P. V. and B. V. Dupoyet (2007a). The impact of fat tails on equilibrium rates of return and term premia. *Journal of Economic Dynamics and Control 31*(3).

Bidarkota, P. V. and B. V. Dupoyet (2007b). Intrinsic bubbles and fat tails in stock prices: A note. *Macroeconomic Dynamics 11*(3).

Bidarkota, P. V., B. V. Dupoyet, and J. H. McCulloch (2009). Asset pricing with incomplete information and fat tails. *Journal of Economic Dynamics and Control 33*(6).

Bidarkota, P. V. and J. H. McCulloch (1998). Optimal univariate inflation forecasting with symmetric stable shocks. *Journal of Applied Econometrics 13*(5), 659–670.

Bidarkota, P. V. and J. H. McCulloch (2003). Consumption asset pricing with stable shocks: Exploring a solution and its implications for mean equity returns. *Journal of Economic Dynamics and Control 27*(3).

Bidarkota, P. V. and J. H. McCulloch (2004). Testing for persistence in stock returns with GARCH-stable shocks. *Quantitative Finance 4*(3).

Bielinskyi, A., S. Semerikov, V. Solovieva, and V. Soloviev (2019, 01). Levy's stable distribution for stock crash detecting. *SHS Web of Conferences 65*, 06006.

Biermé, H. and C. Lacaux (2009). Hölder regularity for operator scaling stable random fields. *Stochastic Processes and their Applications 119*, 2222–2248.

Billingsley, P. (1968). *Convergence of Probability Measures*. New York: Wiley.

Billingsley, P. (1986). *Probability and Measure* (2nd ed.). New York: Wiley.

Binder, I. and M. Braverman (2012). The rate of convergence of the walk on spheres algorithm. *Geometric and Functional Analysis 22*(3), 558–587.

Bingham, N., C. Goldie, and J. Teugels (1987). *Regular Variation*. Cambridge University Press.

Birkner, M., J. Blath, M. Capaldo, A. Etheridge, M. Möhle, J. Schweinsberg, and A. Wakolbinger (2005). Alpha-stable branching and beta coalescents. *Electron. J. Probab. 10*, 303–325.

Bjorck, G. (1956). Distributions of positive mass, which maximize a certain generalized energy integral. *Arkiv fur Matematik 3*(21), 255–269. https://doi.org/10.1007/BF02589412.

Bladt, M. (1992). Multivariate self-similar processes: second order theory. *Journal of Applied Probability*. To appear.

Bladt, M. and J. Yslas (2022). Heavy-tailed phase-type distributions: a unified approach. *Extremes 25*, 529–565. https://doi.org/10.1007/s10687-022-00436-8.

Blattberg, R. and N. Gonedes (1974). A comparison of the stable and Student distributions as statistical models for stock prices. *Journal of Business 47*, 244–280.

Blattberg, R. and T. Sargent (1971). Regression with non-gaussian disturbances: Some sampling results. *Econometrica 39*, 501–510.

Bleher, P. (1981). Inversion of Toeplitz matrices. *Trans. Moscow Math. Soc. 2*, 201–229.

Bleher, P. and J. Sinai (1973). Investigations of the critical point in models of the type of Dyson's hierarchical model. *Commun. Math. Phys. 33*, 23–42.

Blum, J. R., J. Kiefer, and M. Rosenblatt (1961). Distribution free tests of independence based on the sample distribution function. *Ann. Math. Statist. 32*, 485–498.

Blumen, A., J. Klafter, and G. Zumofen (1986, feb). Relaxation behaviour in ultrametric spaces. *Journal of Physics A: Mathematical and General 19*(2), L77–L84.

Blumenson, L. E. (1960). A derivation of n-dimensional spherical coordinates. *The American Mathematical Monthly 67*(1), 63–66.

Blumenthal, R. M. and R. K. Getoor (1960, 09). A dimension theorem for sample functions of stable processes. *Illinois J. Math. 4*(3), 370–375.

Blumenthal, R. M. and R. K. Getoor (1962). The dimension of the set of zeros and the graph of a symmetric stable process. *Illinois Journal of Mathematics 6*(2), 308 – 316.

Blumenthal, R. M. and R. K. Getoor (1968). *Markov processes and potential theory*. Academic Press.

Blumenthal, R. M., R. K. Getoor, and D. B. Ray (1961). On the distribution of first hits for the symmetric stable processes. *Transactions of the American Mathematical Society 99*(3), 540–554.

Bobkov, S. G., G. P. Chistyakov, and F. Götze (2011). Convergence to stable laws in relative entropy. Preprint: arXiv 1104.43.

Bobkov., S. G., G. P. Chistyakov, and F. Götze (2012). Fisher information and convergence to stable laws. Preprint: arXiv 1205.3637.

Boccignone, G. (2019). *Advanced Statistical Methods for Eye Movement Analysis and Modelling: A Gentle Introduction*, pp. 309–405. Springer International Publishing.

Boccignone, G. and M. Ferraro (2013, July). Gaze shift behavior on video as composite information foraging. *Signal Processing: Image Communication 28*(8), 949–966. http://dx.doi.org/10.1016/j.image.2012.07.002.

Bochner, S. (1937). Stable laws of probability and completely monotone functions. *Duke Math. J. 3*(4), 726–728.

Bochner, S. (1955). *Harmonic analysis and the theory of probability*. University of California Press, Berkeley-Los Angeles, Calif.

Bogdan, K., T. Byczkowski, T. Kulczycki, M. Rysnar, R. Song, and Z. Vondraček (2009). *Potential Analysis of Stable Processes and its Extensions*. Berlin: Springer.

Bogdan, K. and T. Zak (2006). On Kelvin transformation. *J Theor Probab 19*, 89–120.

Boggs, J. M. (1991). Database for the first macrodispersion experiment (MADE-1). Technical Report EPRI EN-7363, Tennessee Valley Authority.

Boggs, J. M. (1993). Database for the second macrodispersion experiment (MADE-2). Technical Report TR-102072, Tennessee Valley Authority.

Bojarski, J. and J. K. Misiewicz (2003). Band copulas as spectral measures for two-dimensional stable random vectors. *Discuss. Math. Probab. Stat. 23*(1), 69–75.

Bojdecki, T., L. G. Gorostiza, and A. Talarczyk (2007). A long range dependence stable process and an infinite variance branching system. *Ann. Probab. 35*(2), 500–527.

Bojdecki, T., L. G. Gorostiza, and A. Talarczyk (2008). Self-similar stable processes arising from high-density limits of occupation times of particle systems. *Potential Anal. 28*(1), 71–103.

Boland, J., T. Hurd, M. Pivato, and L. Seco (2000). Measures of dependence for multivariate Lévy distributions. In *Disordered and Complex Systems*, Volume 553, London, pp. 289–295. American Institute of Physics.

Boldi, M.-O. (2009). A note on the representation of parametric models for multivariate extremes. *Extremes 12*(3), 211–218.

Boldi, M.-O. and A. C. Davison (2007). A mixture model for multivariate extremes. *Journal of the Royal Statistical Society: Series B (Statistical Methodology) 69*(2), 217–229.

Boldyrev, S. and C. Gwinn (2003). Scintillations and Lévy flights through the interstellar medium. *Phys. Rev. Lett. 91*, 131101.

Bollerslev, T. (1986). Generalized autoregressive conditional heteroskedasticity. *Journal of Econometrics 31*, 307–327.

Bollerslev, T., R. Chow, and K. Kroner (1992). ARCH modeling in Finance: a review of the theory and empirical evidence. *Journal of Econometrics 52*, 5–59.

Bollmann, C., M. Tummal, J. C. McEachen, J. W. Scrofani, and M. Kraghy (2018). Techniques to improve stable distribution modeling of network traffic. In *Proceedings of the 51st Hawaii International Conference on System Sciences*, pp. 5524–5531. http://hdl.handle.net/10125/50578.

Bonato, M. (2011). Modeling fat tails in stock returns: A multivariate stable-GARCH approach. *Computational Statistics 27*(3), 499–521.

Bonito, A., J. P. Borthagaray, R. H. nochetto, E. Otarola, and A. J. Salgado (2018). Numerical methods for fractional diffusion. *Computing and Visualization in Science 19*, 19–46. https://doi.org/10.1007/s00791-018-0289-y.

Borak, S., W. Härdle, and R. Weron (2005). Stable distributions. In *Statistical tools for finance and insurance*, pp. 21–44. Berlin: Springer.

Borell, C. (1984). On polynomial chaos and integrability. *Prob. and Math. Stat. 3*, 191–203.

Börgers, C. and C. Greengard (2018). Slow convergence in generalized central limit theorems. *Comptes Rendus Mathematique 356*(6), 679–685.

Börner, C. J., I. Hoffmann, J. Krettek, L. Kuerzinger, and T. Schmitz (2021). Extremes of extremes: Risk assessment for very small samples. *SSRN: https://ssrn.com/abstract=3931128*.

Börner, C. J., I. Hoffmann, J. Krettek, L. M. Kürzinger, and T. Schmitz (2021, May). On the return distributions of a basket of cryptocurrencies and subsequent implications. Heinrich Heine University Düsseldorf.

Börner, C. J., I. Hoffmann, J. Krettek, and T. Schmitz (2022, 05). Bitcoin: like a satellite or always hardcore? a core–satellite identification in the cryptocurrency market. *Journal of Asset Management*.

Borovkov, A. and K. Borovkov (2008). *Asymptotic Analysis of Random Walks: Heavy-Tailed Distributions*. Cambridge, UK: Cambridge University Press.

Borulko, V. and S. Vovk (2015, 12). Minimum-duration filtering. *Radio Electronics, Computer Science, Control*.

Bose, A., A. Dasgupta, and H. Rubin (2002). A contemporary review and bibliography of infinitely divisible distributions and processes. *Sankhyā: The Indian Journal of Statistics, Series A (1961-2002) 64*(3), 763–819.

Boto, J. P. and N. Stollenwerk (2009). Fractional calculus and Lévy flights: modelling spatial epidemic spreading. In J. Vigo-Aguiar (Ed.), *Proceedings of the International Conference on Computational and Mathematical Methods in Science and Engineering, CMMSE 2009*, Volume 1. CMMSE.

Bouchaud, J.-P. and A. Georges (1990). Anomalous diffusion in disordered media: statistical mechanisms, models and physical applications. *Physics Reports 195*, 127–293.

Bouchaud, J.-P., D. Sornette, and M. Potters (1997). Option pricing in the presence of extreme fluctuations. In *Mathematics of derivative securities (Cambridge, 1995)*, Volume 15 of *Publ. Newton Inst.*, pp. 112–125. Cambridge: Cambridge Univ. Press.

Boudjelal, A., Z. Messali, L. Boubchir, and N. Chetih (2012, March). Nonparametric bayesian estimation structures in the wavelet domain of multiple noisy image copies. In *2012 6th International Conference on Sciences of Electronics, Technologies of Information and Telecommunications (SETIT)*, pp. 495–501.

Boufoussi, B., M. Dozzi, and R. Guerbaz (2008). Path properties of a class of locally asymptotically self similar processes. *Electron. J. Probab. 13*, no. 29, 898–921.

Boufoussi, B. and Y. Nachit (2021). On the uniform besov regularity of local times of general processes.

Boumans, M. and E.-M. Sent (2013). A Nobel prize for empirical macroeconomics: Assessing the contributions of Thomas Sargent and Christopher Sims. *Review of Political Economy 25*(1), 39 – 56.

Bourguignon, M., M. do Carmo S. Lima, J. Leão, A. D. C. Nascimento, L. G. B. Pinho, and G. M. Cordeiro (2015). A new generalized gamma distribution with applications. *American Journal of Mathematical and Management Sciences 34*(4), 309–342.

Bouwkamp, C. (1958). A simple method of calculating electrostatic capacity. *Physica 24*(1), 538 – 542.

Box, G. and G. Jenkins (1976). *Time Series Analysis Forecasting and Control* (Second ed.). San Francisco: Holden-Day.

Box, G. and M. E. Muller (1958). A note on the generation of random normal deviates. *Annals Math. Stat 29*, 610–611.

Boxma, O. (1996). Regular variation in a multi–source fluid queue. Technical Report BS–R9614, CWI.

Boxma, O. and V. Dumas (1996). Fluid queues with long–tailed activity period distributions. To appear in a Special Issue of *Stochastic Analysis and Optimization of Communication Systems*.

Boyarchenko, S. and S. Levendorskiĭ (2020). Conformal accelerations method and efficient evaluation of stable distributions, revisited. *Acta Applicandae Mathematicae 169*, 711–765.

Bradley, R. (1986). Basic properties of strong mixing conditions. In E. Eberlein and M. Taqqu (Eds.), *Dependence in Probability and Statistics*, pp. 165–192. Birkhäuser.

Bradley, R. (1990). On ρ-mixing except on small sets. *Pac. J. Math. 146*(2), 217–226.

Bradley, R. and M. Peligrad (1986). Invariance principles under a 2 part mixing assumption. *Stoch. Proc. Appl. 22*(2), 271–289.

Bradley, R. C. (1988). A central limit theorem for stationary ρ-mixing sequences with infinite variance. *Ann. Probab. 16*(1), 313–332.

Bradley, R. C. (1992). On the spectral density and asymptotic normality of weakly dependent random fields. *J. Theoret. Probab. 5*(2), 355–373.

Bradu, D. and K. R. Gabriel (1978). The biplot as a diagnostic tool for models of two-way tables. *Technometrics 20*(1), pp. 47–68.

Brant, R. (1984). Approximate likelihood and probability calculations based on transforms. *Ann. Stat 12*, 989–1005.

Braverman, M. and G. Samorodnitsky (1995). Functionals of infinitely divisible stochastic processes with exponential tails. *Stoch. Proc. Appl. 56*, 207–231.

Brcich, R. F., D. R. Iskander, and A. M. Zoubir (2005). The stability test for symmetric alpha stable distributions. *IEEE Transactions on Signal Processing 53*, 977 – 986.

Breiman, L. (1965). On some limit theorems similar to the arc-sin law. *Theory of Probability and its Applications 10*(2), 323–331.

Breiman, L. (1968a). A delicate law of the iterated logarithm for non-decreasing stable processes. *The Annals of Mathematical Statistics 39*(6), 1818–1824.

Breiman, L. (1968b). *Probability*. Redding, Mass.: Addison-Wesley.

Breiman, L. (1992). *Probability*. Philadelphia: SIAM. Reprint of original 1968 edition.

Bremmer, I. and P. Keat (2009). *The Fat Tail*. Oxford, UK: Oxford.

Brent, R. P. (1971). An algorithm with guaranteed convergence for finding a zero of a function. *Comput. J. 14*, 422–425.

Bretagnolle, J., D. Dacunha-Castelle, and J. Krivine (1966). Lois stables et espaces L^p. *Ann. Inst. Henri Poincaré 2*, 231–259. Section B.

Breuer, P. and P. Major (1983). Central limit theorems for non-linear functionals of Gaussian fields. *Journal of Multivariate Analysis 13*, 425–441.

Brichet, F., J. Roberts, A. Simonian, and D. Veitch (1996). Heavy traffic analysis of a storage model with long range dependent on/off sources. Preprint.

Brillinger, D. (1972). On the number of solutions of systems of random equations. *Ann. Math. Stat. 43*, 534–540.

Brindley, J. and J. Thompson (1972). Dependence and aging aspects of multivariate survival. *J. Amer. Statist. Assoc. 67*, 821–829.

Briskot, U., I. A. Dmitriev, and A. D. Mirlin (2014, Feb). Relaxation of optically excited carriers in graphene: Anomalous diffusion and Lévy flights. *Phys. Rev. B 89*, 075414.

Brockmann, D. and L. Hufnagel (2007, Apr). Front propagation in reaction-superdiffusion dynamics: Taming lévy flights with fluctuations. *Phys. Rev. Lett. 98*, 178301.

Brockmann, D., L. Hufnagel, and T. Geisel (2006). The scaling laws of human travel. *Nature 439*, 462–465.

Brockwell, P. and R. Davis (1987). *Time Series: Theory and Methods*. New York: Springer-Verlag.

Brockwell, P. and R. Davis (1991). *Time Series: Theory and Methods* (Second ed.). New York: Springer-Verlag.

Brockwell, P. J. and B. M. Brown (1978). Expansions for the positive stable laws. *Z. Wahr. Geb. 45*, 213–224.

Broda, S. A., M. Haas, J. Krause, M. S. Paolella, and S. C. Steude (2013). Stable mixture GARCH models. *Journal of Econometrics 172*(2), 292 – 306.

Broido, A. D. and A. Clauset (2018, January). Scale-free networks are rare. *ArXiv e-prints*.

Brorsen, B. W. and S. R. Yang (1990). Maximum likelihood estimates of symmetric stable distribution parameters. *Commun. Stat. Simula. 19*, 1459–1464.

Brothers, K. M., W. H. DuMouchel, and A. S. Paulson (1983). Fractiles of the stable laws. Technical report, Rensselaer Polytechnic Institute, Troy, NY.

Brown, B. M. (1970). Characteristic functions, moments and the central limit theorem. *Ann. Math. Stat. 41*, 658–664.

Brown, B. M. and T. P. Hettmansperger (1996). Normal scores, normal plots and tests for normality. *JASA 91*, 1668–1675.

Brown, G. W. and J. W. Tukey (1946). Some distribution of sample means. *Ann. Math. Stat. 17*, 1–12.

Brown, L. and Y. Rinott (1988). Inequalities for multivariate infinitely divisible processes. *The Annals of Probability 16*, 642–657.

Brown, L. D. (1986). *Fundamentals of Statistical Exponential Families with Applications in Statistical Decision Theory*, Volume 9 of *Lecture Notes-Monograph Series*. Institute of Mathematical Statistics.

Brown, R. J. (2000). *Return distributions of private real estate investment*. Ph. D. thesis, University of Pennsylvania.

Brown, R. J. (2004). Risk and private real estate investments. *J. of Real Estate Portfolio Management 10*(2), 113–127.

Brown, R. J. (2005). *Private Real Estate Investment : Data Analysis and Decision Making*. Academic Press/Elsevier.

Browne, M. W. (1984). Asymptotically distribution-free methods for the analysis of covariance structures. *British Journal of Mathematical and Statistical Psychology 37*, 62–83.

Brynjolfsson, E., Y. J. Hu, and M. D. Smith (2006, Summer). From niches to riches: Anatomy of the long tail. *Sloan Management Review 47*(4), 67–71.

Bücher, A., H. Dette, and S. Volgushev (2011). New estimators of the Pickands dependence function and a test for extreme-value dependence. *The Annals of Statistics 39*(4), 1963–2006.

Buckle, D. J. (1993). *Stable distributions and portfolio analysis: A Bayesian approach via MCMC*. Ph. D. thesis, Imperial College, London.

Buckle, D. J. (1994). The study of a function relating to stable distributions. *Statistics and Probability Letters 20*, 85–90.

Buckle, D. J. (1995). Bayesian inference for stable distributions. *JASA 90*, 605–613.

Bucur, C., S. Dipierro, L. Lombardini, J. M. Maz'on, and E. Valdinoci (2020). (s, p)-harmonic approximation of functions of least $w^{s,1}$-seminorm. *arXiv: Analysis of PDEs*. arXiv:2009.14659v2.

Bucur, C. and E. Valdinoci (2016). *Nonlocal Diffusion and Applications*. Springer International Publishing.

Buja, A. and D. Asimov (1986). Grand tour methods. In D. Allen (Ed.), *Computer Science and Statistics. Proceedings of the 17th Symposium on the Interface*. Elsevier (North Holland).

Bullock, J. M. and R. T. Clarke (2000). Long distance seed dispersal by wind: measuring and modelling the tail of the curve. *Oecologia 124*, 506–521. https://doi.org/10.1007/PL00008876.

Bulyak, E. and N. Shul'ga (2019, Apr). Statistics of relativistic electrons radiating in periodic fields. *Phys. Rev. Accel. Beams 22*, 040705.

Buntine, W. (2022, Nov). Understanding hierarchical processes. *Entropy 24*(12).

Buonocore, S., M. Sen, and F. Semperlotti (2020). Stochastic scattering model of anomalous diffusion in arrays of steady vortices. *Proceedings of the Royal Society A 476*(2238). https://doi.org/10.1098/rspa.2020.0183.

Buraczewski, D., E. Damek, and Y. Guivarc'h (2010). Convergence to stable laws for a class of multidimensional stochastic recursions. *Probability Theory and Related Fields 148*(3/4), 333 – 402.

Buriticá, G., T. Mikosch, and O. Wintenberger (2021, June). Large deviations of lp-blocks of regularly varying time series and applications to cluster inference. *arXiv e-prints*, arXiv:2106.12822.

Buriticá, G. and P. Naveau (2021). Stable sums to infer high return levels of multivariate rainfall time series. 10.48550/ARXIV.2112.02878.

Burke, M. D., M. Csörgő, S. Csörgő, and P. Révész (1979). Approximations of the empirical process when parameters are estimated. *Ann. Probab. 7*(5), 790–810.

Burnecki, K., A. Wylomanska, and A. Chechkin (2015, 12). Discriminating between light- and heavy-tailed distributions with limit theorem. *PLOS ONE 10*(12), 1–23.

Burton, R. and E. Waymire (1984). Scaling limits for point random fields. *Journal of Multivariate Analysis 15*, 237–251.

Burton, R. and E. Waymire (1985). Scaling limits for associated random measures. *Annals of Probability 13*, 1267–1278.

Byczkowska, H. and T. Byczkowski (1981). A generalization of the zero-one law for Gaussian measures on metric Abelian groups. *Bull. l'Acad. Polon. Sc., Sér. Math. 29*, 187–191.

Byczkowska, H. and T. Byczkowski (1988). Zero-one law for subgroups of paths of group-valued stochastic processes. *Studia Math. 89*, 65–73.

Byczkowski, T. (1977a). Gaussian measures on L_p spaces, $0 \leq p < \infty$. *Studia Math. 59*, 249–261.

Byczkowski, T. (1977b). Some results concerning Gaussian measures on metric spaces. *Lect. Notes Math. 656*, 1–16.

Byczkowski, T. (1978). Gaussian measures on metric Abelian groups. in probability measures on groups. proc. oberwolfach. *Lect. Notes Math. 706*, 41–53.

Byczkowski, T. (1980). Zero-one laws for Gaussian measures on metric Abelian groups. *Studia Math. 69*, 159–189.

Byczkowski, T. and A. Hulanicki (1983). Gaussian measure of normal subgroups. *The Annals of Probability 11*, 685–691.

Byczkowski, T., J. P. Nolan, and B. Rajput (1993). Approximation of multidimensional stable densities. *J. Multivar. Anal. 46*, 13–31.

Byczkowski, T. and B. Rajput (1993). Zero-one laws for semigroups of measures on groups. In S. Cambanis, J. Ghosh, R. Karandikar, and P. Sen (Eds.), *Chaos Expansions, Stochastic Proceses, A Festschrift in Honour of Gopinath Kallianpur*, pp. 23–30. Springer Verlag.

Byczkowski, T. and B. S. Rajput (1992). Tail behavior for semigroups of measures on groups. *J. Theoret. Probab. 5*(3), 537–544.

Byczkowski, T., B. S. Rajput, and T. Żak (1996). Zeros of the densities of infinitely divisible measures on $\mathbf{R}^n$. *J. Theoret. Probab. 9*(2), 533–540.

Cabral, T. W., M. Khosravy, F. M. Dias, H. L. Moreira Monteiro, M. A. Alves Lima, L. R. Manso Silva, R. Naji, and C. A. Duque (2019). Chapter 4 - compressive sensing in medical signal processing and imaging systems. In N. Dey, J. Chaki, and R. Kumar (Eds.), *Sensors for Health Monitoring*, Volume 5 of *Advances in ubiquitous sensing applications for healthcare*, pp. 69–92. Academic Press.

Čačko, J., M. Bílý, and J. Bukoveczky (1988). *Random Processes: Measurement, Analysis and Simulation.* Amsterdam: Elsevier.

Cai, X., G. Zhang, C. Zhang, W. Fan, J. Li, and G. Pedersen (2020, 05). Dynamic channel modeling for indoor millimeter-wave propagation channels based on measurements. *IEEE Transactions on Communications*.

Calder, M. (1998). *Parameter estimation for noncausal and heavy tailed autoregressive processes*. Ph. D. thesis, Colorado State.

Cambanis, S. (1983). Complex symmetric stable variables and processes. In P. Sen (Ed.), *Contribution to Statistics, Essays in Honor of Norman L. Johnson*, pp. 63–79. North-Holland.

Cambanis, S. (1984). Similarities and contrasts between Gaussian and other stable signals. In P. Butzer (Ed.), *Fifth Aachen Colloquium on Mathematical Methods in Signal Processing*, Aachen, pp. 113–120. Technische Hochshule Aachen.

Cambanis, S. (1988). Admissible translates of stable processes: A survey and some new results. Preprint, *Center for Stochastic Processes*, Tech. Report, No. 235.

Cambanis, S., C. Hardin, and A. Weron (1984). Ergodic properties of stationary stable processes. Technical Report 59, Center for Stoch. Proc., University of North Carolina, Chapel Hill.

Cambanis, S., C. Hardin, and A. Weron (1987). Ergodic properties of stationary stable processes. *Stochastic Proc. Appl. 24*, 1–18.

Cambanis, S., C. Hardin, and A. Weron (1988). Innovations and Wold decompositions of stable sequences. *Probab. Th. Rel. Fields 79*, 1–27.

Cambanis, S. and C. Houdré (1990). Moving averages vs Fourier transforms. Preprint, *Center for Stoch. Proc.* Tech. Report No. 296.

Cambanis, S., R. Keener, and G. Simons (1983). On α-symmetric multivariate distributions. *J. Multivar. Anal. 13*, 213–233.

Cambanis, S. and N. Kôno (1976). Convergence en loi et lois du logarithme itéré pour les vecteurs gaussiens. *Zeitschrift für Wahrscheinlichkeitstheorie und verwandte Gebiete 36*, 241–267.

Cambanis, S. and M. Maejima (1989). Two classes of self-similar stable processes with stationary increments. *Stoch. Proc. Appl. 32*, 305–329.

Cambanis, S., M. Maejima, and G. Samorodnitsky (1990). Characterization of linear and harmonizable fractional stable motions. Preprint.

Cambanis, S. and E. Masry (1991). Wavelet approximation of deterministic and random signals: Convergence properties and rates. Technical Report 352, Center for Stochastic Processes, Univ. of North Carolina.

Cambanis, S. and G. Miller (1980). Some path properties of pth order and stable processes. *Ann. Prob. 6*, 1148–1156.

Cambanis, S. and G. Miller (1981). Linear problems in pth order and symmetric stable processes. *SIAM J. Appl. Math. 41*, 43–69.

Cambanis, S., J. Nolan, and J. Rosiński (1990). On the oscillation of infinitely divisible processes. *Stochastic Proc. Appl. 35*, 87–97.

Cambanis, S. and B. S. Rajput (1973). Some zero-one laws for Gaussian processes. *Ann. Probability 1*, 304–312.

Cambanis, S., J. Rosiński, and W. Woyczynski (1985). Convergence of quadratic forms in p-stable random variables and θ_p-radonifying operators. *Ann. Prob. 13*, 885–897.

Cambanis, S., G. Samorodnitsky, and M. Taqqu (1991). *Stable Processes and Related Topics*, Volume 25 of *Progress in Probability*. Boston: Birkhäuser.

Cambanis, S. and A. R. Soltani (1984). Prediction of stable processes: Spectral and moving average representation. *Zeitschrift für Wahrscheinlichkeitstheorie und verwandte Gebiete 66*, 593–612.

Cambanis, S. and A. Taraporevala (1995). Infinitely divisible processes with stable marginals. Unpublished manuscript, UNC Dept. of Statistics.

Cambanis, S. and W. Wu (1992). Multiple regression on stable vectors. *Journal of Multivariate Analysis 41*, 243–272.

Camborata, C. and M. E. Corrias (2018). Lévy stable distributions. Master degree, University of Bologna, Physics Department.

Cameron, R. and R. Graves (1951). Additive functionals on a space of continuous functions. *Transactions of the American Mathematical Society 70*, 160–176.

Cameron, R. and W. Martin (1947). The orthogonal development of nonlinear functionals in series of Fourier-Hermite functionals. *Ann. Math. 48*, 385–389.

Campi, G. and A. Bianconi (2019). Evolution of complexity in out-of-equilibrium systems by time-resolved or space-resolved synchrotron radiation techniques. *Condensed Matter 4*(32), 1–14.

Candés, E. J., X. Li, Y. Ma, and J. Wright (2010). Robust principal component analysis? *Journal of ACM 58*(1), 1–37.

Cappé, O., E. Moulines, J.-C. Pesquet, A. P. Petropulu, and X. Yang (2002). Long-range dependence and heavy-tail modeling for teletraffic data. *IEEE Signal Processing Magazine 19*, 14–27.

Carassso, A. S. (2002). The APEX method in image sharpening and the use of low exponent Lévy stable laws. *SIAM J. Appl. Math. 63*, 593 – 618.

Carassso, A. S. (2006). APEX blind deconvolution of color hubble space telescope imagery and other astronomical data. *Optical Engineering 45*, 107004.

Carlson, R. E. and F. N. Fritsch (1991). A bivariate interpolation algorithm for data that are monotone in one variable. *SIAM J. Sci. Statist. Comput. 12*(4), 859–866.

Caron, F. and E. B. Fox (2017). Sparse graphs using exchangeable random measures. *Journal of the Royal Statistical Society: Series B (Statistical Methodology) 79*(5), 1295–1366.

Carr, P., H. Geman, D. B. Madan, and M. Yor (2002). The fine structure of asset returns: An empirical investigation. *Journal of Business 75*(2), 305–332.

Carr, P. and L. Wu (2003). Finite moment log stable process and option pricing. *Journal of Finance 58*(2), 753–777.

Carrillo, R. E., T. C. Aysal, and K. E. Barner (2010). A generalized cauchy distribution framework for problems requiring robust behavior. *EURASIP Journal on Advances in Signal Processing*.

Carrillo, R. E., A. B. Ramirez, G. R. Arce, K. E. Barner, and B. M. Sadler (2016). Robust compressive sensing of sparse signals: a review. *EURASIP Journal on Advances in Signal Processing 2016*(1), 108.

Cartea, Á. and S. Howison (2003, August). Distinguished limits of Lévy-stable processes, and applications to option pricing. Preprint available online at `http://www.ems.bbk.ac.uk/faculty/cartea/index_html`.

Cartea, Á. and S. Howison (2007, September). Option pricing with Lévy-stable processes generated by Lévy-stable integrated variance. Preprint available online at `http://www.ems.bbk.ac.uk/faculty/cartea/index_html`.

Cartier, P. (1971). Introduction à l'étude des mouvements browniens à plusieurs paramètres. In *Séminaire de Probabilités V*, pp. 58–75. New York: Springer Verlag. Lecture Notes in Mathematics, Vol. 191.

Casella, G. and R. Berger (1990). *Statistical Inference*. Wadsworth and Brooks/Cole.

Cassandro, M. and G. Jona-Lasinio (1978). Critical point behavior and probability theory. *Adv. in Physics 27*, 913–941.

Castillo, E., A. S. Hadi, N. Balakrishnan, and J. M. Sarabia (2004). *Extreme Value and Related Models with Applications in Engineering and Science*. Wiley.

Castro-Camilo, D., M. de Carvalho, and J. Wadsworth (2018). Time-varying extreme value dependence with application to leading European stock markets1. *Annals of Applied Statistics 12*(1), 283–309.

Cauchy, A. (1853). Sur les résultats les plus probables. *Comptes Rendus Acad. Sci. Paris 37*, 198–206.

Chakrabarty, A. and P. Roy (2010, November). Group theoretic dimension of stationary symmetric α-stable random fields. Preprint.

Chakrabarty, A. and G. Samorodnitsky (2012). Understanding heavy tails in a bounded world or, is a truncated heavy tail heavy or not? *Stochastic Models 28*(1), 109–143.

Chakraborty, P., M. M. Meerschaert, and C. Y. Lim (2009). Parameter estimation for fractional transport: a particle tracking approach. *Water Resources Research 45*, W10415. doi:10.1029/2008WR007577.

Chambers, J., C. Mallows, and B. Stuck (1976). A method for simulating stable random variables. *Journal of the American Statistical Association 71*(354), 340–344. Correction in *JASA 82* (1987), 704.

Champagnat, N., M. Deaconu, A. Lejay, N. Navet, and S. Boukherouaa (2013). An empirical analysis of heavy-tails behavior of financial data: The case for power laws. hal-00851429 https://hal.inria.fr/hal-00851429.

Chatelain, S., A.-L. Fougères, and J. G. Nešlehová (2020). Inference for Archimax copulas. *The Annals of Statistics 48*(2), 1025 – 1051.

Chatterjee, S., R. Peled, Y. Peres, and D. Romik (2010). Gravitational allocation to Poisson points. *Annals of Mathematics 172*(1), 617–671.

Chave, A. D. (2014). Magnetotelluric data, stable distributions and impropriety: an existential combination. *Geophysical Journal International 198*(1), 622–636.

Chave, A. D. (2017). Estimation of the magnetotelluric response function: The path from robust estimation to a stable maximum likelihood estimator. *Surveys in Geophysics 38*(5), 1–31.

Chekhmenok, S. L. (2003). On the calculation of the density and distribution function of the probabilities of strictly symmetric stable random variables. *Vestn. Beloruss. Gos. Univ. Ser. 1 Fiz. Mat. Inform.* (3), 95–98, 110.

Chen, F., S. G. Meintanis, and L. Zhu (2023). Testing semiparametric model-equivalence hypotheses based on the characteristic function. *Journal of Statistical Computation and Simulation*, 1–33.

Chen, P., C.-S. Deng, R. L. Schilling, and L. Xu (2023). Approximation of the invariant measure of stable sdes by an Euler–Maruyama scheme. *Stochastic Processes and their Applications*.

Chen, R. and L. Shepp (1983). On the sum of symmetric random variables. *Amer. Statist. 37*, 237.

Chen, W. and S. Holm (2003). Modified szabo's wave equation models for lossy media obeying frequency power law. *Journal of the Acoustical Society of America 114*(5), 2570–2584.

Chen, W., H. Sun, X. Zhang, and D. Korošak (2010). Anomalous diffusion modeling by fractal and fractional derivatives. *Computers & Mathematics with Applications 59*(5), 1754 – 1758. Fractional Differentiation and Its Applications.

Chen, Y., H. So, and E. Kuruoglu (2016). Variance analysis of unbiased least ℓ_p-norm estimator in non-Gaussian noise. *Signal Processing 122*, 190–203.

Chen, Y., H. So, E. Kuruoglu, and X. Yang (2017). Variance analysis of unbiased complex-valued ℓ_p-norm minimizer. *Signal Processing 135*, 17–25.

Chen, Z. (2022). Robust tests for combining p-values under arbitrary dependency structures. *Scientific Reports 12*. Article 3158, https://doi.org/10.1038/s41598-022-07094-7.

Chen, Z.-G. and E. Hannan (1980). The distribution of the periodogram ordinates. *Journal of Time Series Analysis 1*, 73–82.

Chen, Z.-Q. and Y. Shiozawa (2007). Limit theorems for branching Markov processes. *J. Funct. Anal. 250*(2), 374–399.

Chen, Z.-Q. and R. Song (1998). Estimates on Green functions and Poisson kernels for symmetric stable processes. *Math. Ann. 312*, 465–501.

Cheng, B. and P. Robinson (1991). Density estimation in strongly dependent non-linear time-series. *Statistica Sinica 1*, 335–359.

Cheng, B. and P. Robinson (1992). Semiparametric estimation of time series with strong dependence. Preprint.

Cheng, B. N. and S. T. Rachev (1995). Multivariate stable securities in financial markets. *Math. Finance 5*, 133–153.

Cheng, R. C. H. and W. B. Liu (1997). A continuous representation of the family of stable law distributions. *Journal of the Royal Statistical Society B 59*(1), 137–145.

Chenouri, S., J. Liang, and C. G. Small (2014). Robust dimension reduction. *WIREs Comput Stat online*, 1–7. doi: 10.1002/wics.13331.

Chentsov, N. (1957). Lévy's Brownian motion of several parameters and generalized white noise. *Theory Probabl. Appl. 2*, 265–266.

Cherapanamjeri, Y., N. Tripuraneni, P. L. Bartlett, and M. I. Jordan (2020). Optimal mean estimation without a variance.

Chhetri, S., H. Long, and C. Ball (2024). Parameter estimation for geometric lévy processes with constant volatility. *Ann. Data. Sci.*. https://doi.org/10.1007/s40745-024-00513-8.

Chi, M., E. Neal, and G. Young (1973). Practical application of fractional Brownian motion and noise to synthetic hydrology. *Water Resour. Res. 9*, 1523–1533.

Chiapino, M., S. Clémençon, V. Feuillard, and A. Sabourin (2020). A multivariate extreme value theory approach to anomaly clustering and visualization. *Comput Stat 35*, 607–625. https://doi.org/10.1007/s00180-019-00913-y.

Chifurira, R. and K. Chinhamu (2019, 10). Evaluating South Africa's market risk using asymmetric power auto-regressive conditional heteroscedastic model under heavy-tailed distributions. *Journal of Economic and Financial Sciences 12*.

Chihara, T. (1968). On indeterminate Hamburger moment problems. *Pacific Journal of Mathematics 27*(3), 475–484.

Chinhamu, K., C.-K. Huang, and D. Chikobvu (2015, 12). Evaluating risk in gold prices with generalized hyperbolic and stable distributions. Volume Proceedings of the 57th Annual Conference of SASA, pp. 17–24. South African Statistical Association.

Chistyakov, V. (1964). A theorem on sums of independent random variables and its applications to branching random processes. *Theory of Probability and its Applications 9*, 640–648.

Chitre, M. A., J. R. Potter, and S. Ong (2004, November). Underwater acoustic channel characterisation for medium-range shallow water communications. In *Oceans 2004 Conference*, Japan. MTS/IEEE.

Chitre, M. A., J. R. Potter, and S. Ong (2005). Performance of coded ofdm in very shallow water channels and snapping shrimp noise. In *Oceans 2005 Conference*, Washington, DC. MTS/IEEE.

Chitre, M. A., J. R. Potter, and S. Ong (2006). Optimal and near-optimal signal detection in snapping shrimp dominated ambient noise. *IEEE J. of Oceanic Engineering 31*(2), 497–503.

Chitre, M. A., J. R. Potter, and S. Ong (2007). Viterbi decoding of convolutional codes in symmetric alpha-stable noise. *IEEE Trans. on Communications 55*(12), 2230–2233.

Choquet-Bruhat, Y. (1967). *Problems and solutions in mathematical physics*. San Francisco: Holden-Day.

Choudhury, G. L. and W. Whitt (1995). Long-tail buffer-content distributions in broadband networks. Preprint.

Chover, J. (1966). A law of the iterated logarithm for stable summands. *Proc. Amer. Math. Soc. 17*, 441–443.

Chover, J., P. Ney, and S. Wainger (1973a). Degeneracy properties of subcritical branching processes. *The Annals of Probability 1*, 663–673.

Chover, J., P. Ney, and S. Wainger (1973b). Functions of probability measures. *J. Analyse Math. 26*, 255–302.

Chow, T. L. and J. L. Teugels (1979). The sum and the maximum of i.i.d. random variables. In *Proceedings of the Second Prague Symposium on Asymptotic Statistics (Hradec Králové, 1978)*, pp. 81–92. North-Holland, Amsterdam-New York.

Chow, Y. and H. Teicher (1988). *Probability Theory: Independence, Interchangeability, Martingales* (2nd ed.). New York: Springer Verlag.

Christoph, G. and W. Wolf (1992). *Convergence Theorems with a Stable Limit Law*. Berlin: Akademie Verlag.

Chu, L. (1990). Bandwidth selection for nonparametric regression with long memory noise. Preprint.

Chui, C. (1992). *An Introduction to Wavelets*. Academic Press, Boston.

Chung, D. M. and B. S. Rajput (1981). Equivalent Gaussian measure whose R-N derivative is the exponential of a diagonal form. *J. Math. Anal. Appl. 81*(1), 219–233.

Chung, D. M., B. S. Rajput, and A. Tortrat (1982). Semistable laws on topological vector spaces. *Z. Wahrsch. Verw. Gebiete 60*(2), 209–218.

Chung, K. (1974). *A Course in Probability Theory* (2nd ed.). New York: Academic Press.

Chung, K. and W. Fuchs (1951). On the distribution of values of sums of random variables. *Mem. Amer. Math. Soc. 6*.

Cioczek-Georges, R., M. M. Mandelbrot, G. Samorodnitsky, and M. S. Taqqu (1995). Stable fractal class of pulses: the cylindrical case. *Bernoulli 1*, 201–216.

Cioczek-Georges, R. and M. Taqqu (1993). Form of the conditional variance for symmetric stable random variables. Preprint.

Cioczek-Georges, R. and M. Taqqu (1994a). How do conditional moments of stable vectors depend on the spectral measure? *Stoch. Proc. Appl. 54*, 95–112.

Cioczek-Georges, R. and M. Taqqu (1995a). Necessary conditions for the existence of conditional moments of stable random variables. *Stoch. Proc. Appl. 56*, 233–246.

Cioczek-Georges, R. and M. S. Taqqu (1994b). Does asymptotic linearity of the regression extend to stable domains of attraction? *J. Multivariate Anal. 48*(1), 70–86.

Cioczek-Georges, R. and M. S. Taqqu (1995b). Necessary conditions for the existence of conditional moments of stable random variables. *Stochastic Process. Appl. 56*(2), 233–246.

Cioczek-Georges, R. and M. S. Taqqu (1998). Sufficient conditions for the existence of conditional moments of stable random variables. In *Stochastic processes and related topics*, Trends Math., pp. 35–67. Boston, MA: Birkhäuser Boston.

ckauskas, A. R. (1980). A family of stable measures in some Banach spaces. *Lietuvos Matem. Rikninys 20*, 133–145.

Clarkson, R. (2002, 01). A fractal probability distribution for financial risk applications.

Clauset, A., C. Shalizi, and M. Newman (2009). Power-law distributions in empirical data. *SIAM Rev. 51*(4), 661–703.

Clavier, L., G. Peters, F. Septier, and I. Nevat (2021). Impulsive noise modeling and robust receiver design. *J Wireless Com Network 13*. https://doi.org/10.1186/s13638-020-01868-1.

Clementi, A., F. d'Amore, G. Giakkoupis, and E. Natale (2021). Search via parallel lévy walks on z^2. In *Proceedings of the 2021 ACM Symposium on Principles of Distributed Computing*, PODC'21, New York, NY, USA, pp. 81–91. Association for Computing Machinery.

Climent Hernández, J. and C. Cruz-Matú (2017, 08). Pricing of a structured product on the sx5e when the uncertainty of returns is modeled as a log-stable process. *Contaduría y Administración 62*.

Cline, D. (1983a). *Estimation and linear prediction for regression, autoregression and ARMA with infinite variance data*. Ph. D. thesis, Colorado State University.

Cline, D. (1983b). Infinite series of random variables with regularly varying tails. Technical Report 83–24, Insitutute of Applied Mathematics and Statistics, University of British Columbia, Vancouver, B.C.

Cline, D. (1985). Linear prediction of ARMA processes with infinite variance. *Stochastic Processes and their Applications 19*, 281–296.

Cline, D. (1986). Convolutions tails, product tails and domain of attraction. *Probab. Theory Rel. Fields 72*, 529–557.

Cline, D. (1987). Convolutions of distributions with exponential and subexponential tails. *J. Austral. Math. Soc. 43*, 347–365. (Series A).

Cline, D. (1989). Consistency for least squares regression estimators with infinite variance. *J. Stat. Plan. Infer. 23*, 163–179.

Cline, D. (1994). Intermediate regular and π variation. *Proceedings of London Mathematical Society 68*, 594–616.

Cline, D. and P. Brockwell (1985). Linear prediction of ARMA processes with infinite variance. *Stochastic Processes and their Applications 19*, 281–296.

Cline, D. and T. Hsing (1991). Large deviation probabilities for sums and maxima of random variables with heavy or subexponential tails. Preprint, Texas A&M University.

Cline, D. and G. Samorodnitsky (1994). Subexponentiality of the product of independent random variables. *Stochastic Processes and Their Applications 49*, 75–98.

Coates, D. and S. Luzzatto (2024). Persistent non-statistical dynamics in one-dimensional maps. *Commun. Math. Phys. 405*(102).

Coates, M. and E. Kuruoğlu (2002). Time-frequency-based detection in impulsive noise environments using α-stable noise models. *Signal Processing 82*(12), 1917–1925. cited By 5.

Coeurjolly, J.-F., J. Møller, and R. Waagepetersen (2016). A tutorial on palm distributions for spatial point processes.

Cohen, J. (1974). Superimposed renewal processes and storage with gradual input. *Stochastic Processes and Their Applications 2*, 31–58.

Cohen, J., S. Resnick, and G. Samorodnitsky (1997). Sample correlations of infinite variance time series models: An empirical and theoretical study. Technical report. Avaliable as ht-cor.ps at http://www.orie.cornell.edu/ gennady/techreports.

Cohen, J., S. Resnick, and G. Samorodnitsky (1998). Sample correlations of infinite variance time series models: an empirical and theoretical study. *J. Appl. Math. Stochastic Anal. 11*(3), 255–282.

Cohen, S., M. M. Meerschaert, and J. Rosiński (2010). Modeling and simulation with operator scaling. *Stochastic Processes and their Applications 120*(12), 2390 – 2411.

Cohen, S. and J. Rosiński (2007). Gaussian approximation of multivariate Lévy processes with applications to simulation of tempered stable processes. *Bernoulli 13*(1), 195–210.

Cohn, D. (1972). Measurable choice of limit points and the existence of separable and measurable processes. *Z. Wahr. verw. Geb. 22*, 161–165.

Coles, S. (2001). *An introduction to statistical modeling of extreme values*. Springer Series in Statistics. Springer-Verlag London, Ltd., London.

Cont, R. (2001). Empirical properties of asset returns: stylized facts and statistical issues. *Quantitative Finance 1*, 223–236.

Cont, R. and P. Tankov (2004). *Financial modelling with jump processes*. Chapman & Hall/CRC Financial Mathematics Series. Chapman & Hall/CRC, Boca Raton, FL.

Cooley, D. and E. Thibaud (2019, 06). Decompositions of dependence for high-dimensional extremes. *Biometrika 106*(3), 587–604.

Cools, R., T. O. Espelid, and J. Berntsen (1993). DCUTET: An algorithm for adaptive cubature over a collection of tetrahedrons. To appear in ACM Trans. on Math. Softw.

Copas, J. B. (1975). On the unimodality of the likelihood for the cauchy distribution. *Biometrika 62*(3), pp. 701–704.

Cormode, G. (2003). Stable distributions for stream computations: it's as easy as 0,1,2. In *Workshop on Management and Processing of Massive Data Streams at FCRC*.

Cormode, G., M. Datar, P. Indyk, and S. Muthukrishnan (2002). Comparing data streams using hamming norms (How to zero in). In *Proceedings of the 28th DLDB Conference, Hong Kong*.

Cormode, G. and P. Indyk (2006). Stable distributions in streaming computations. In M. Garofalakis, J. Gehrke, and R. Rastogi (Eds.), *Data Stream Management: Processing High-Speed Data Streams*. Springer. (The book containing this chapter has yet to be published).

Cormode, G. and S. Muthukrishnan (2003). Estimating dominance norms of multiple data streams. In *Proceedings of European Symposium on Algorithms*.

Cornfeld, I., S. Fomin, and Y. G. Sinai (1982). *Ergodic Theory*. Springer-Verlag.

Cortés-Aburto, O., J.-A. Hernández-Pérez, R. Rojas-Rodríguez, R.-M. Aceves-Pérez, S.-A. Arroyo-Díaz, and J.-V. Galaviz-Rodríguez (2018). Particle swarm optimization with Lévy flights for heat source estimation. *Heat Transfer Research 49*(8), 703–717.

Costa, T., G. Boccignone, F. Cauda, and M. Ferraro (2016). The foraging brain: Evidence of Lévy dynamics in brain networks. *PLoS ONE 11*(9), e0161702.

Courrège, P. (1964). Générateur infinitésimal d'un semi-groupe de convolution sur R^n, et formule de Lévy-Khinchine. *Bull. Sci. Math. (2) 88*, 3–30.

Cox, D. (1981). Statistical analysis of time series: some recent developments. *Scand. J. Statist. 8*, 93–115.

Cox, D. (1984). Long-range dependence: a review. In H. David and H. David (Eds.), *Statistics: An Appraisal*, pp. 55–74. Iowa State University Press.

Cramér, H. (1962). On the approximation to a stable probability distribution. In *Studies in mathematical analysis and related topics*, pp. 70–76. Stanford, Calif.: Stanford Univ. Press.

Cramér, H. (1963). On asymptotic expansions for sums of independent random variables with a limiting stable distribution. *Sankhyā Ser. A 25 (1963), 13-24; addendum, ibid. 25*, 216.

Cramér, H. and M. Leadbetter (1967). *Stationary and Related Stochastic Processes*. New York: Wiley.

Crato, N., R. R. Linhares, and S. R. Lopes (2011). α-stable laws for noncoding regions in dna sequences. *Journal of Applied Statistics 38*(2), 261–271.

Cressie, N. (1975). A note on the behavior of stable distributions for small index α. *Z. Wahr. verw. Gebiete 33*, 61–64.

Crone, L. J. and D. S. Crosby (1995, August). Statistical applications of a metric on subspaces to satellite meteorology. *Technometrics 37*(3), 324–328.

Crovella, M. and A. Bestavros (1995). Explaining world wide web traffic self–similarity. Preprint available as TR-95-015 from Boston University.

Crovella, M. and A. Bestavros (1996). Self–similarity in World Wide Web traffic: evidence and possible causes. *Performance Evaluation Review 24*, 160–169.

Crovella, M., M. Taqqu, and A. Bestavros (1998). *A practical guide to heavy tails*, Chapter Heavy-tailed probability distributions in the World Wide Web, pp. 3–26. Boston: Birkhauser.

Crovella, M. E. and L. Lipsky (1997). Long-lasting transient conditions in simulations with heavy-tailed workloads. In S. Andradottir, K. J. Healy, D. H. Withers, and B. L. Nelson (Eds.), *Proceedings of the 1997 Winter Simulation Conference*. ACM.

Croydon, D. and T. Kumagai (2008). Random walks on Galton-Watson trees with infinite variance offspring distribution conditioned to survive. *Electron. J. Probab. 13*, no. 51, 1419–1441.

Csabay, M. and B. Stehlikova (2020). Firm size distribution and the effects of ownership type. *Journal of Competitiveness 12*(4), 22–38. doi: 0.7441/joc.2020.04.02.

Şimşekli, U., L. Zhu, Y. Whye Teh, and M. Gürbüzbalaban (2020, February). Fractional Underdamped Langevin Dynamics: Retargeting SGD with Momentum under Heavy-Tailed Gradient Noise. *arXiv e-prints*, arXiv:2002.05685.

Csiszár, I. and B. S. Rajput (1976). A convergence of types theorem for probability measures on topological vector spaces with applications to stable laws. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete 36*(1), 1–7.

Csörgõ, T., S. Hegyi, and I. Szanyi (2024). Simple Lévy α-stable model analysis of elastic pp and $p\overline{p}$ low-$|t|$ data from SPS to LHC energies. *Universe 10*(3).

Csorgo, M. (1981). Limit behavior of the empirical characteristic function. *Annals of Probablity 9*, 130–144.

Csörgő, S. (1981a). The empirical characteristic process when parameters are estimated. In *Contributions to probability*, pp. 215–230. New York: Academic Press.

Csörgő, S. (1981b). Limit behaviour of the empirical characteristic function. *Ann. Probab. 9*(1), 130–144.

Csörgő, S. (1981c). Multivariate characteristic functions and tail behaviour. *Z. Wahrsch. Verw. Gebiete 55*(2), 197–202.

Csörgő, S. (1981d). Multivariate empirical characteristic functions. *Z. Wahrsch. Verw. Gebiete 55*(2), 203–229.

Csörgő, S. (1984). Adaptive estimation of the parameters of stable laws. In *Limit theorems in probability and statistics, Vol. I, II (Veszprém, 1982)*, Volume 36 of *Colloq. Math. Soc. János Bolyai*, pp. 305–367. Amsterdam: North-Holland.

Csörgő, S. (1985). Testing for independence by the empirical characteristic function. *J. Multivariate Anal. 16*(3), 290–299.

Csörgő, S. (1987). Testing for stability. In *Goodness-of-fit (Debrecen, 1984)*, Volume 45 of *Colloq. Math. Soc. János Bolyai*, pp. 101–132. Amsterdam: North-Holland.

Csörgő, S., E. Haeusler, and D. M. Mason (1988). A probabilistic approach to the asymptotic distribution of sums of independent, identically distributed random variables. *Adv. in Appl. Math. 9*(3), 259–333.

Csörgő, S. and C. R. Heathcote (1987). Testing for symmetry. *Biometrika 74*(1), 177–184.

Csörgő, S., L. Horváth, and D. M. Mason (1986). What portion of the sample makes a partial sum asymptotically stable or normal? *Probab. Theory Relat. Fields 72*(1), 1–16.

Csörgő, S. and D. M. Mason (1986). The asymptotic distribution of sums of extreme values from a regularly varying distribution. *Ann. Probab. 14*(3), 974–983.

Csörgő, T., S. Hegyi, T. Novák, and W. A. Zajc (2005). Bose-Einstein or HBT correlations and the anomalous dimension of QCD. *Acta Phys. Polon. B36*, 329–337.

Csorgo, T., S. Hegyi, T. Novák, and W. A. Zajc (2006). Bose-Einstein or HBT correlation signature of a second order QCD phase transition. *AIP Conf. Proc. 828*, 525–532.

Csörgő, T., S. Hegyi, and W. A. Zajc (2004a). Bose-Einstein correlations for Lévy stable source distributions. *European Physics J. C 36*, 67 – 78.

Csörgő, T., S. Hegyi, and W. A. Zajc (2004b). Stable Bose-Einstein correlations.

Csörgő, T., W. Kittel, W. J. Metzger, and T. Novák (2008). Parametrization of Bose-Einstein Correlations and Reconstruction of the Space-Time Evolution of Pion Production in e+e- Annihilation. *Phys. Lett. B663*, 214–216.

Cunha, A. Bestavros, and M. Crovella (1995). Characteristics of www client–based traces. Preprint available as BU-CS-95-010, Boston University.

Cushman, J. H. and M. Moroni (2001). Statistical mechanics with three-dimensional particle tracking velocimetry experiments in the study of anomalous dispersion. I. Theory. *Physics of Fluids 13*(1), 75–80.

Cushman, J. H., M. Park, N. Kleinfelter, and M. Moroni (2005). Super-diffusion via lévy lagrangian velocity processes. *Geophys. Res. Letters 32*(9).

Cuzick, J. (1978). Local nondeterminism and the zeros of Gaussian processes. *Ann. Probability 6*(1), 72–84.

Cuzick, J. (1987). Correction: "Local nondeterminism and the zeros of Gaussian processes" [Ann. Probab. **6** (1978), no. 1, 72–84; MR0488252 (58 #7813)]. *Ann. Probab. 15*(3), 1229.

Czado, C. and A. Min (2011). *Handbook on Vines*, Chapter Bayesian Inference for D-vines: Estimation and Model Selection. World Scientific.

Dabrowski, A. and A. Jakubowski (1994). Stable limits for associated random variables. *The Annals of Probability 22*(1), 1–16.

Dabrowski, A. R., H. G. Dehling, T. Mikosch, and O. Sharipov (2002). Poisson limits for U-statistics. *Stochastic Processes and their Applications 99*(1), 137 – 157.

D'Agostino, R. B. and M. A. Stephens (1986). *Goodness-of-Fit Techniques*. Marcel Dekker.

Dahlhaus, R. (1989). Efficient parameter estimation for self similar processes. *Ann. Stat. 17*(4), 1749–1766.

Dahlhaus, R. (1992). Efficient location and regression estimation for long range dependent regression models. Preprint.

Daley, D. (1971). The definition of a multidimensional generalization of shot noise. *Journal of Applied Probab. 8*, 128–135.

Dance, C. R. and E. E. Kuruoğlu (1999). Estimation of the parameters of skewed α-stable distributions. In J. P. Nolan and A. Swami (Eds.), *Proceedings of the ASA-IMS Conference on Heavy Tailed Distributions*.

Darling, D. A. (1978). The maximum of sums of stable random variables. *Trans. Amer. Math. Soc. 83*(1), 164–169.

Das, B. and S. I. Resnick (2008). Qq plots, random sets and data from a heavy tailed distribution. *Stochastic Models 24*(1), 103 – 132.

Dassios, A. (1995). The distribution of the quantiles of a Brownian motion with drift and the pricing of path-dependent options. *Annals of Applied Probability 5*, 389–398.

Dassios, A. (1996). Sample quantiles of stochastic processes with stationary and independent increments and of sums of exchangeable random variables. *Annals of Applied Probability 6*, 1041–1043.

Dassios, A., Y. Qu, and H. Zhao (2018, January). Exact simulation for a class of tempered stable distributions. London School of Economics http://eprints.lse.ac.uk/86981/.

Dattoli, G., K. Górska, A. Horzela, and K. Penson (2014). Photoluminescence decay of silicon nanocrystals and Lévy stable distributions. *Physics Letters A 378*(30), 2201 – 2205.

Daubechies, I. (1992). *Ten Lectures on Wavelets*. SIAM Philadelphia. CBMS-NSF series, Volume 61.

Daul, S., E. DeGiorgi, F. Lindskog, and A. McNeil (2003, November). The grouped t-copula with an application to credit risk. *RISK 16*(11), 73–76.

Davenport, M. A., M. F. Duarte, Y. C. Eldar, and G. Kutyniok (2012). *Introduction to compressed sensing*, pp. 1–64. Cambridge University Press.

Davis, R. (1983). Stable limits for partial sums of dependent random variables. *The Annals of Probability 11*, 262–269.

Davis, R., J. Marengo, and S. Resnick (1985). Extremal properties of a class of multivariate moving averages. In *Proceedings of the 45th session of the International Statistical Institute, Vol. 4 (Amsterdam, 1985)*, Volume 51, pp. 185–192.

Davis, R., J. P. Nolan, and S. Resnick (2018). Ratios of stable variables. In progress.

Davis, R. and S. Resnick (1984). Tail estimates motivated by extreme value theory. *Ann. Statist. 12*, 1467–1487.

Davis, R. and S. Resnick (1985a). Limit theory for moving averages of random variables with regularly varying tail probabilities. *The Annals of Probability 13*(1), 179–195.

Davis, R. and S. Resnick (1985b). More limit theory for the sample correlation function of moving averages. *Stochastic Process. Appl. 20*(2), 257–279.

Davis, R. and S. Resnick (1986a). Limit theory for the sample correlation function of moving averages. In *Dependence in Probability and Statistics (Oberwolfach, 1985)*, Volume 11 of *Progress Probab. Statist.*, pp. 417–426. Boston, MA: Birkhäuser Boston.

Davis, R. and S. Resnick (1986b). Limit theory for the sample covariance and correlation functions of moving averages. *Annals of Statistics 14*, 533–558.

Davis, R. and S. Resnick (1996). Limit theory for bilinear processes with heavy–tailed noise. *Annals of Applied Probability 6*, 1191–1210.

Davis, R. A., K. Fokianos, S. H. Holan, H. Joe, J. Livsey, R. Lund, V. Pipiras, and N. Ravishanker (2021). Count time series: A methodological review. *Journal of the American Statistical Association 116*(535), 1533–1547.

Davis, R. A. and T. Mikosch (1998). The sample autocorrelations of heavy-tailed processes with applications to ARCH. *Ann. Statist. 26*(5), 2049–2080.

Davis, R. A. and T. Mikosch (1999). The maximum of the periodogram of a non-Gaussian sequence. *Ann. Probab. 27*(1), 522–536.

Davison, A. C. and R. L. Smith (1990). Models for exceedances over high thresholds. *J. Roy. Statist. Soc. Ser. B 52*(3), 393–442. With discussion and a reply by the authors.

Davydov, Y., I. Molchanov, and S. Zuyev (2007). Stable distributions and harmonic analysis on convex cones. *C. R. Math. Acad. Sci. Paris 344*(5), 321–326.

Davydov, Y., I. Molchanov, and S. Zuyev (2008). Strictly stable distributions on convex cones. *Electron. J. Probab. 13*, no. 11, 259–321.

Davydov, Y. and A. Nagaev (1999). On the approach to simulation of a symmetric stable vector based on discretization of the spectral measure. Publ. IRMA, Lille, 50 XII, 1-14.

Davydov, Y. and A. Nagaev (2002a). Limit theorems and simulation of stable random vectors. In I. Berkes, E. Csáki, and M. Csörgő (Eds.), *Limit Theorems in Probability and Statistics, Balatonelelle, 1999*, Volume 1, pp. 495–519. János Bolyai Mathematical Society, Budapest.

Davydov, Y. and A. Nagaev (2002b). On two approaches to approximation of multidimensional stable laws. *J. Multivariate Analysis 82*(1), 210–239.

Davydov, Y. and A. Nagaev (2004). On the role played by extreme summands when a sum of i.i.d. random vectors is asymptotically α-stable.

Davydov, Y. and V. I. Paulauskas (1999a). On the estimation of the parameters of multivariate stable distributions. *Acta Appl. Math. 58*(1-3), 107–124. Limit theorems of probability theory (Vilnius, 1999).

Davydov, Y. and V. I. Paulauskas (2004). Recent results on p-stable convex compact sets with applications. In *Asymptotic methods in stochastics*, Volume 44 of *Fields Inst. Commun.*, pp. 127–139. Providence, RI: Amer. Math. Soc.

Davydov, Y., V. I. Paulauskas, and A. Račkauskas (2000). More on p-stable convex sets in Banach spaces. *J. Theoret. Probab. 13*(1), 39–64.

Davydov, Y. A. (1970). The invariance principle for stationary processes. *Theor. Probability Appl. 15*, 487–498.

Davydov, Y. A. and V. I. Paulauskas (1999b). On the estimation of the parameters of multivariate stable distributions. *Acta Applicandae Mathematicae 58*, 107–124.

Dawson, D. and H. Salehi (1980). Spatially homogeneous random evolutions. *Journal of Multivariate Analysis 10*, 141–180.

Dawson, D. A., K. Fleischmann, and L. G. Gorostiza (1989). Stable hydrodynamic limit fluctuations of a critical branching particle system in a random medium. *Ann. Probab. 17*(3), 1083–1117.

Dawson, D. A. and E. A. Perkins (1991). Historical processes. *Mem. Amer. Math. Soc. 93*(454), iv+179.

de Acosta, A. (1975). Stable measures and seminorms. *The Annals of Probability 3*, 865–875.

de Acosta, A. (1976). Quadratic zero-one laws for Gaussian measures and the distribution of quadratic forms. *Proceedings of the American Mathematical Society 54*, 319–325.

de Acosta, A. (1977). Asymptotic behavior of stable measures. *The Annals of Probability 5*, 494–499.

de Acosta, A. (1980). Exponential moments of vector-valued random series and triangular arrays. *Ann. Prob. 8*, 381–389.

de Boor, C. (1978). *A Practical Guide to Splines*. New York: Springer-Verlag.

de Haan, L. (1970). *On Regular Variation and its Application to the Weak Convergence of Sample Extremes*. Mathematisch Centrum Amsterdam.

de Haan, L. (1978). A characterization of multidimensional extreme-value distributions. *Sankhya Ser. A 40*, 85–88.

de Haan, L. and A. F. Ferreira (2006). *Extreme Value Theory*. New York: Springer.

de Haan, L., D. Li, L. Peng, and H. I. Pereira (2002). Alternative conditions for attraction to stable vectors. *Probability and Mathematical Statistics 22*, 303 – 317.

de Haan, L. and L. Peng (1999). Exact rates of convergence to a stable law. *J. London Math. Soc. (2) 59*, 1134–1152.

de Haan, L. and S. Resnick (1977). Limit theory for multivariate sample extremes. *Zeitschrift für Wahrscheinlichkeitstheorie und Verwandte Gebiete 40*, 317–337.

de Haan, L. and S. Resnick (1998). On asymptotic normality of the Hill estimator. *Stochastic Models 14*(4), 849–866.

de Haan, L., S. Resnick, H. Rootzén, and C. de Vries (1989). Extremal behaviour of solutions to a stochastic difference equation with application to ARCH processes. *Stochastic Processes and Their Applications 32*, 213–224.

de la Pena, V., H. Gzyl, S. Mayoral, and H. Zou (2022, 04). Prediction and estimation of random variables with infinite mean or variance.

de la Pena, V. and S. Montgomery-Smith (1995). Decoupling inequalities for the tail probabilities of multivariate U–statistics. *Annals of Probability 23*, 817–851.

de Oliveira, E. C. and J. A. Tenreiro Machado (2014). A review of definitions for fractional derivatives and integral. *Mathematical Problems in Engineering 2014*(238459), 1–6. http://dx.doi.org/10.1155/2014/238459.

de Sousa, B. and G. Michailidis (2004). A diagnostic plot for estimating the tail index of a distribution. *Journal of Computational and Graphical Statistics 13*(4), 974–995.

De Vany, A. (2003). *Hollywood Economics: How extreme uncertainty shapes the film industry*. Routledge.

De Vany, A. (2006). Steroids, home runs and the law of genius. Online at http://www.arthurdevany.com/research.html; to appear in Economic Inquiry.

De Vany, A. and W. D. Walls (1999). Uncertainty in the movie industry: Does star power reduce the terror of the box office? *Journal of Cultural Economics 23*(4), 285–318.

De Vany, A. and W. D. Walls (2004a). Motion picture profit, the stable Paretian hypothesis, and the curse of the superstar. *Journal of Economic Dynamics and Control 28*, 2035–2057.

De Vany, A. S. and W. D. Walls (1996). Bose-einstein dynamics and adaptive contracting in the motion picture industry. *The Economic Journal 106*(439), 1493–1514.

De Vany, A. S. and W. D. Walls (2004b). Motion picture profit, the stable paretian hypothesis, and the curse of the superstar. *Journal of Economic Dynamics and Control 28*(6), 1035 – 1057.

Decreusefond, L., M. Schulte, and C. Thäle (2016). Functional Poisson approximation in Kantorovich-Rubinstein distance with applications to U-statistics and stochastic geometry. *Ann. Probab. 44*(3), 2147–2197.

Dehling, H., M. Denker, and W. Philipp (1984). Invariance principles for von Mises and U-statistics. *Zeitschrift für Wahrscheinlichkeitstheorie und verwandte Gebiete 67*, 139–167.

Dehling, H. and M. Taqqu (1991). Bivariate symmetric statistics of long-range dependent observations. *Journal of Statistical Planning and Inference 28*, 153–165.

Dehling, H. and M. S. Taqqu (1987). The limit behavior of empirical processes and symmetric statistics for stationary processes. In *Bulletin of the International Statistical Institute*, Tokyo, pp. Book 4, 217–234. Proceedings of the 46th Session of the International Statistical Institute. 52.

Dehling, H. and M. S. Taqqu (1989a). The empirical process of some long-range dependent sequences with an application to U-statistics. Preprint. To appear in the Annals of Statistics.

Dehling, H. and M. S. Taqqu (1989b). The functional law of the iterated logarithm for the empirical process of some long-range dependent sequences. *Statistics and Probability Letters 7*, 81–85.

Dekkers, A. and L. de Haan (1993). Optimal choice of sample fraction in extreme-value estimation. *Journal of Multivariate Analysis*.

Dekkers, A. L. M., J. H. J. Einmahl, and L. de Haan (1989). A moment estimator for the index of an extreme-value distribution. *Annals of Statistics 17*, 1833–1855.

del Barrio, E., P. Deheuvels, and S. van de Geer (2007). *Lectures on empirical processes*. EMS Series of Lectures in Mathematics. European Mathematical Society (EMS), Zürich. Theory and statistical applications, With a preface by Juan A. Cuesta Albertos and Carlos Matrán.

del Rosario, Z., R. W. Fenrich, and G. Iaccarino (2021). When are allowables conservative? *American Institute of Aeronautics and Astronautics Journal 59*(5), 1760–1772.

del Val, J. R., F. Simmross-Wattenberg, and C. Alberola-López (2017). libstable: Fast, parallel, and high-precision computation of α-stable distributions in R, C/C++, and MATLAB. *Journal of Statistical Software, Articles 78*(1), 1–25.

Dematteis, G., T. Grafke, M. Onorato, and E. Vanden-Eijnden (2019, Dec). Experimental evidence of hydrodynamic instantons: The universal route to rogue waves. *Phys. Rev. X 9*, 041057.

Dematteis, G., T. Grafke, and E. Vanden-Eijnden (2018). Rogue waves and large deviations in deep sea. *Proceedings of the National Academy of Sciences 115*(5), 855–860.

Dembo, A., E. Mayer-Wolf, and O. Zeitouni (1995). Exact behavior of Gaussian seminorms. *Stat. Probab. Lett. 23*, 275–280.

Dembo, A. and O. Zeitouni (1993). *Large Deviations Techniques and Applications*. Boston: Jones and Bartlett Publishers.

Demni, N. (2011). Kanter random variable and positive free stable distributioins. *Elect. Comm. in Probab. 16*, 137–149.

Denker, M. and A. Jakubowski (1989). Stable limit distributions for strongly mixing sequences. *Statist. Probab. Lett. 8*(5), 477–483.

Deo, R. (2000). On estimation and testing goodness of fit for m-dependent stable sequences. *J. of Econometrics 99*(2), 349–372.

Der, R. (2003). Stable symmetric distributions and their role in the signal separation problem. Technical report, Telecommunications and Signal Processing Laboratory, McGill University.

Desbiens, J. (1987). Caractérisation d'un espace préhilbertien au moyen de la relation d'orthogonalite de birkhoff-james. In J. Dubois and G. Isac (Eds.), *Les Annales des Sciences Mathématiques du Québec*, pp. 295–303. Groupe des chercheurs en sciences mathématiques.

DeSilva, B. M. (1978). A class of multivariate symmetric stable distributions. *J. Multvariate Analysis 8*, 335–345.

DeSilva, B. M. (1979). The quotient of certain stable random variables. *Sankhya Series B 40*, 279–281.

d'Estampes, L., B. Garel, and D. Tjøstheim (2002). On a new measure of covariation for stable random variables. preprint.

Devroye, L. (1986). *Non-Uniform Random Variate Generation*. N. Y.: Springer Verlag.

Devroye, L. (1993). A triptych of discrete distributions related to the stable law. *Statist. Probab. Lett. 18*(5), 349–351.

Devroye, L. (2009). Random variate generation for exponentially and polynomially tilted stable distributions. *ACM Trans. Model. Comput. Simul. 19*(4), 18–1.

Devroye, L. and J. P. Nolan (2024). Random variate generation for the first hit of the symmetric stable process in R^d. *J. Statistical Theory and Practice*.

De Donno, M., R. Donati, G. Favero, and P. Modesti (2019). Risk estimation for short-term financial data through pooling of stable fits. *Financial Markets and Portfolio Management 33*, 447 – 470. https://doi.org/10.1007/s11408-019-00340-5.

Dharmadhikari, S. and K. Joag-Dev (1988). *Unimodality, convexity, and applications*. Probability and Mathematical Statistics. Boston, MA: Academic Press Inc.

Dharmadhikari, S. W. and M. Sreehari (1976). A note on stable characteristic functions. *Sankhyā Ser. A 38*(2), 179–185.

Di Gioacchino, M., A. Bianconi, M. Burghammer, G. Ciasca, F. Bruni, and G. Campi (2019). Myelin basic protein dynamics from out-of-equilibrium functional state to degraded state in myelin. *bioRxiv*.

Di Nezza, E., G. Palatucci, and E. Valdinoci (2012). Hitchhikers guide to the fractional sobolev spaces. *Bulletin des Sciences Mathématiques 136*(5), 521–573.

Di Vita, Andrea (2019). On the response of power law distributions to fluctuations. *Eur. Phys. J. B 92*(11), 255.

Diao, H., R. Jayaram, Z. Song, W. Sun, and D. Woodruff (2019, 09). Optimal sketching for Kronecker product regression and low rank approximation. www.researchgate.net.

Dias, N. L. and P. J. Ribeiro (2019, 12). Practical rules for summing the series of the Tweedie probability density function with high-precision arithmetic. *Anais da Academia Brasileira de Ciências 91*.

Diebold, F. and G. Rudebusch (1989). Long memory and persistence in aggregate output. *Journal of Monetary Economics 24*, 189–209.

Diebold, F. and G. Rudebusch (1991). On the power of Diskery-Fuller tests against fractional alternatives. *Economics Letters 35*, 155–160.

Dierckx, P., S. Van Leemput, and T. Vermeire (1992). Algorithms for surface fitting using Powell-Sabin splines. *IMA J. Numer. Anal. 12*(2), 271–299.

Diestel, J. and J. U. Jr. (1977). Vector measures. *Math. Surveys 15*.

Ding, C., C. Yan, X. Zeng, and W. Cai (2022). A parallel iterative probabilistic method for mixed problems of Laplace equations with the Feynman-Kac formula of killed Brownian motions. *SIAM Scientific Computing*. To appear.

Ding, Y. and Q. Peng (2021, 04). Series representation of jointly SαS distribution via symmetric covariations. *Communications in Mathematics and Statistics 9*.

Ding, Y., Q. Peng, and Y. Xiao (2023). Linear multifractional stable sheets in the broad sense: Existence and joint continuity of local times. *Bernoulli 29*(1), 785 – 814.

Ding, Y., J. Shen, J. Lu, and J. Kurths (2019, 10). Stochastic resonance in genetic regulatory networks under Lévy noise. *EPL (Europhysics Letters) 127*, 50003.

Dishon, M., G. H. Weiss, and J. T. Bendler (1985). Stable law densities and linear relaxation phenomena. *J. Res. National Bureau of Standards 90*, 27 – 39.

Dißmann, J., E. Brechmann, C. Czado, and D. Kurowicka (2013). Selecting and estimating regular vine copulae and application to financial returns. *Computational Statistics and Data Analysis 59*(1), 52–69.

Ditlevsen, P. D. (2004). *Turbulence and Climate Dynamics*. Copenhagen: Frydenberg.

Dobric, V., M. B. Marcus, and M. Weber (1988). The distribution of large values of the supremum of a Gaussian process. *Astérisque 157-158*, 95–128.

Dobrushin, R. and P. Major (1979). Non-central limit theorems for non-linear functions of Gaussian fields. *Zeitschrift für Wahrscheinlichkeitstheorie und verwandte Gebiete 50*, 27–52.

Dobrushin, R. and P. Major (1981). On the asymptotic behavior of some self-similar random fields. *Sel. Math. Sov. 1(3)*.

Dominicy, Y., H. Ogata, and D. Veredas (2010, August). Quantile-based inference for elliptical distributions. Available at `http://ssrn.com/abstract=1006749`.

Doney, R. and G. O'Brien (1991). Loud shot noise. *Ann. Appl. Probab. 1*, 88–103.

Dontchev, A. L., H. D. Qi, L. Qi, and H. Yin (2002). A Newton method for shape-preserving spline interpolation. *SIAM J. Optimization 13*, 588–602.

Doob, J. (1953). *Stochastic Processes*. Wiley.

Doob, J. L. (1954). Semimartingales and subharmonic functions. *Transactions of the American Mathematical Society 77*, 86–121.

Doob, J. L. (1984). *Classical potential theory and its probabilistic counterpart*, Volume 262 of *Grundlehren der Mathematischen Wissenschaften [Fundamental Principles of Mathematical Sciences]*. New York: Springer-Verlag.

Doornik, J. A. and H. Hansen (2008). An omnibus test for univariate and multivariate normality. *Oxford Bulletin of Economics and Statistics 70*, 927–939.

Dor, L. (1976). Potentials and isometric embeddings in l_1. *Israel J. Math. 24*, 260–268.

Doray, L. G., S. M. Jiang, and A. Luong (2009). Some simple methods of estimation for the parameters of the discrete stable distribution with the probability generating function. *Communications in Statistics - Simulation and Computation 38*, 2004–2017.

Dorniani, S., A. Mohammadpour, N. Nematollahi, and J. P. Nolan (2012). Estimation of the location and scale parameters of stable distributions using a ranked set sample. Preprint.

Douglas, J. F. (2007). *Some Applications of Fractional Calculus to Polymer Science*, pp. 121–191. John Wiley & Sons, Ltd.

Douglas, J. F. and A. Friedman (1995). *Mathematics in Industrial Problems*, Chapter 15. Coping with complex boundaries, pp. 166–185. Springer Verlag.

Douglas, J. F., H.-X. Zhou, and J. B. Hubbard (1994). Hydrodynamic friction and the capacitance of arbitrarily shaped objects. *Physical Review E 49*(6), 5319–5331.

Doukhan, P., P. Massart, and E. Rio (1992). The functional central limit theorem for strong mixing processes. Preprint.

Doukhan, P., G. Opppenheim, and M. Taqqu (2003). *Theory and Applications of Long-Range Dependence*. Boston: Birkhäuser.

Drapatz, M. (2017). Limit theorems for the sample mean and sample autocovariances of continuous time moving averages driven by heavy-tailed Lévy noise. *ALEA, Lat. Am. J. Probab. Math. Stat. 14*, 403–426. DOI: 10.30757/ALEA.v14-22.

Draper, N. R. and H. Smith (1981). *Applied Regression Analysis* (2nd ed.). New York: Wiley.

Drew, L. (2020). The nervous systems of foraging and predatory animals may prompt them to move along a special kind of random path called a lévy walk to find food efficiently when no clues are available. *Quanta*. https://www.quantamagazine.org/random-search-wired-into-animals-may-help-them-hunt-20200611/.

Duczkowski, N. (2021). Zastosowanie rozkładu α-stabilnego do modelowania zmian cen ubezpieczeń [eng. application of the α-stable distribution to modeling changes in insurance prices]. *Wiadomości Ubezpieczeniowe [eng. Insurance Review]*. DOI: https://doi.org/10.33995/wu2021.2.7.

Dudley, J., G. Genty, A. Mussot, A. Chabchoub, and F. Dias (2019). Rogue waves and analogies in optics and oceanography. *Nature Reviews Physics 1*, 675–689. doi:10.1038/s42254-019-0100-0.

Dudley, R. (1967). The sizes of compact subsets of Hilbert space and continuity of Gaussian processes. *J. Funct. Analysis 1*, 290–330.

Dudley, R. (1973). Sample functions of the Gaussian process. *The Annals of Probability 1*, 66–103.

Dudley, R. (1989). *Real Analysis and Probability*. Wadsworth and Brook/Cole.

Dudley, R. and M. Kanter (1974). Zero-one laws for stable measures. *Proceedings of the American Mathematical Society 45*, 245–252.

Dudley, R. M. and M. Kanter (1983). Correction to: "Zero-one laws for stable measures" [Proc. Amer. Math. Soc. **45** (1974), 245–252; MR **51** #6901]. *Proc. Amer. Math. Soc. 88*(4), 689–690.

Duffield, N. and N. O'Connell (1995). Large deviations and overflow probabilities for the general single–server queue, with applications. *Mathematical Proceedings of Cambridge Philosophical Society 118*, 363–374.

Dufour, J.-M. and J.-R. Kurz-Kim (2005, November). Exact inference and optimal invariant estimation for the tail coefficient of symmetric α-stable distributions. Preprint, BundesBank November 2005 Conference.

DuMouchel, W. H. (1971). *Stable distributions in statistical inference*. Ph. D. thesis, Univ. Ann Arbor, Univ. Microfilms, Ann Arbor, Mich.

DuMouchel, W. H. (1973a). On the asymptotic normality of the maximum-likelihood estimate when sampling from a stable distribution. *Ann. Stat. 1*, 948–957.

DuMouchel, W. H. (1973b). Stable distributions in statistical inference. 1: Symmetric stable distributions compared to other symmetric long-tailed distributions. *JASA 68*, 469–477.

DuMouchel, W. H. (1975). Stable distributions in statistical inference 2: Information from stably distributed samples. *JASA 70*, 386–393.

DuMouchel, W. H. (1983). Estimating the stable index α in order to measure tail thickness: A critique. *Ann. Stat. 11*, 1019–1031.

Dunford, N. and J. Schwartz (1988). *Linear Operators, Part 1: General Theory.* New York: Wiley.

Dunning, T. (2021). The t-digest: Efficient estimates of distributions. *Software Impacts 7*, 100049.

Dunning, T. and O. Ertl (2019). Computing extremely accurate quantiles using t-digests. https://arxiv.org/abs/1902.04023.

Duo, S. and Y. Zhang (2019, 10). Accurate numerical methods for two and three dimensional integral fractional Laplacian with applications. *Computer Methods in Applied Mechanics and Engineering 355*, 639–662.

Duquesne, T. and J.-F. Le Gall (2002). Random trees, Lévy processes and spatial branching processes. *Astérisque* (281), vi+147.

Durbin, J. and M. Cordero (1993, April). Handling structural shifts, outliers and heavy-tailed distribution in state space time series models. Technical Report RR-93/03, Bureau of the Census, Washington, DC.

Dürr, D., S. Goldstein, and J. Lebowitz (1983). Stochastic processes originating in deterministic microscopic dynamics. *J. Stat. Physics 30*, 519–526.

Durrett, R. (1996). *Probability: Theory and Examples* (2nd ed.). Belmont, California: Duxbury Press.

Durrett, R. (2013). Cancer modeling: A personal perspective. *Notices of the Amer. Math. Society 60*(3), 304–309.

Durrett, R., J. Foo, K. Leder, J. Mayberry, and F. Michor (2011). Intratumor heterogeneity in evolutionary models of tumor progression. *Genetics 188*, 1–17.

Dutfoy, A., S. Parey, and N. Roche (2014). Multivariate extreme value theory - a tutorial with applications to hydrology and meteorology. *Dependence Modeling 2*(1), 000010247820140003.

Dyda, B. (2012). Fractional calculus for power functions and eigenvalues of the fractional Laplacian. *Fractional Calculus and Applied Analysis 15*(4), 536–555.

Dynkin, E. and A. Mandelbaum (1983). Symmetric statistics, Poisson point processes and multiple Wiener integrals. *Ann. Stat. 11*, 739–745.

Dyson, F. (1971). An Ising ferromagnet with discontinuous long-range order. *Commun. Math. Physics 21*, 269–283.

Easton, G. S. and R. E. McCulloch (1990). A multivariate generalization of quantile-quantile plots. *JASA 85*, 376–386.

Eberhard, J. and P. Horn (1978). Excess 1/f noise in metals. *Phys. Rev. B 18*, 6681–6693.

Eberlein, E. and U. Keller (1994). Hyperbolic distributions in Finance. Technical report.

Eberlein, E. and M. S. Taqqu (1986). *Dependence in Probability and Statistics*, Volume 11 of *Progress in Probability and Statistics Series*. Boston: Boston: Birkhauser.

Echaust, K. and M. Just (2020, 04). A comparison of conditional and unconditional var models. pp. 124–135.

Edelsbrunner, H. (2001). *Geometry and topology for mesh generation*, Volume 7 of *Cambridge Monographs on Applied and Computational Mathematics*. Cambridge: Cambridge University Press.

Edelsbrunner, H. and D. R. Grayson (1999). Edgewise subdivision of a simplex. In *Proceedings of the Fifteenth Annual Symposium on Computational Geometry (Miami Beach, FL, 1999)*, New York, pp. 24–30 (electronic). ACM.

Edelsbrunner, H. and D. R. Grayson (2000). Edgewise subdivision of a simplex. *Discrete Comput. Geom. 24*(4), 707–719. ACM Symposium on Computational Geometry (Miami, FL, 1999).

Edwards, A. M., R. A. Phillips, N. W. Watkins, M. P. Freeman, E. J. Murphy, V. Afanasyev, S. V. Buldyrev, M. G. E. da Luz, E. P. Raposo, H. E. Stanley, and G. M. Viswanathan (2007). Revisiting lévy flight search patterns of wandering albatrosses, bumblebees and deer. *Nature 449*, 1044–1048.

Edwards, R. (1982). *Fourier Series* (Second ed.), Volume 2. Springer-Verlag.

Efron, B. (1969). Student's t-test under symmetry conditions. *J. Amer. Statist. Assoc. 64*, 1278–1302.

Egan, M. (2019, April). On Capacity Sensitivity in Additive Vector Symmetric α-Stable Noise Channels. In *WCNC 2019 - IEEE Wireless Communications and Networking Conference*, Marrakech, Morocco, pp. 1–6. IEEE.

Egan, M. (2021). Isotropic and non-isotropic signaling in multivariate α-stable noise. *Frontiers in Communications and Networks 2*, 54.

Eiderman, V. Y. (1997, dec). Estimates for potentials and δ-subharmonic functions outside exceptional sets. *Izvestiya: Mathematics 61*(6), 1293–1329.

El Barmi, H. and P. I. Nelson (1997). Inference from stable distributions. In *Selected Proceedings of the Symposium on Estimating Functions (Athens, GA, 1996)*, Volume 32 of *IMS Lecture Notes Monograph Series*, pp. 439–456. Hayward, CA: Institute of Mathematical Statistics.

Ellis, R. (1988). Inequalities for multivariate compound Poisson distributions. *The Annals of Probability 16*, 658–661.

Elton, D. C. (2018, August). Stretched Exponential Relaxation. *arXiv e-prints*, arXiv:1808.00881.

Embrechts, P. (1983). A property of the generalized inverse gaussian distribution with some applications. *J. Appl. Prob. 20*, 537–544.

Embrechts, P. and C. Goldie (1982). On convolution tails. *Stochastic Processes and Their Applications 13*, 263–278.

Embrechts, P., C. Goldie, and N. Veraverbeke (1979). Subexponentiality and infinite divisibility. *Zeitschrift für Wahrscheinlichkeitstheorie und verwandte Gebiete 49*, 335–347.

Embrechts, P., C. Klüppelberg, and T. Mikosch (1997). *Modelling Extreme Events for Insurance and Finance*. Berlin: Springer-Verlag.

Embrechts, P. and M. Maejima (2002). *Self-similar Processes*. Princeton University Press.

Embrechts, P., S. I. Resnick, and G. Samorodnitsky (1999). Extreme value theory as a risk management tool. *N. Am. Actuar. J. 3*(2), 30–41. SOA Seminar: Integrated Approaches to Risk Measurement in the Financial Services Industry (Atlanta, GA, 1997).

Embrechts, P., L. Rogers, and M. Yor (1995). A proof of Dassios' representation of the α-quantile of Brownian motion with drift. *Annals of Applied Probability 5*, 757–767.

Embrechts, P. and G. Samorodnitsky (1995). Sample quantiles of heavy tailed stochastic processes. *Stochastic Processes and Their Applications 59*, 217–233.

Engelke, S. and A. S. Hitz (2018, Dec). Graphical Models for Extremes. *arXiv e-prints*, arXiv:1812.01734.

Engelke, S., A. Malinowski, Z. Kabluchko, and M. Schlather (2015). Estimation of Hüsler–Reiss distributions and Brown–Resnick processes. *Journal of the Royal Statistical Society. Series B (Statistical Methodology) 77*(1), 239–265.

Engle, R. (1982). Autoregressive conditional heteroskedasticity with estimates of the variance of U.K. inflation. *Econometrica 50*, 987–1008.

Enss, V. (1978). Renormalization group limits for Wick polynomials of Gaussian processes. *Reports of Math. Phys. 13*, 87–99.

Epps, T. W. (1993). Characteristic functions and their empirical counterparts: geometrical interpretations and applications to statistical inference. *JASA 47*, 33–48.

Epps, T. W. and L. B. Pulley (1983). A test for normality based on the empirical characteristic function. *Biometrika 70*, 723–726.

Epstein, B. (1948). Some applications of the Mellin transform in statistics. *Ann. Math. Statistics 19*, 370–379.

Erramilli, A., O. Narayan, and W. Willinger (1996). Experimental queueing analysis with long–range dependent packet traffic. *IEEE/ACM Transactions on Network Computing 4*, 209–223.

Esary, J., F. Proschan, and D. Walkup (1967). Association of random variables, with applications. *Ann. Math. Statist. 38*, 1466–1474.

Evans, R. M., U. N. Katugampola, and D. A. Edwards (2017). Applications of fractional calculus in solving Abel-type integral equations: Surface–volume reaction problem. *Computers and Mathematics with Applications 73*(6), 1346–1362. Advances in Fractional Differential Equations (IV): Time-fractional PDEs.

Fabricius, T., P. Kidmose, and L. K. Hansen (2001). Dynamic components of linear stable mixtures from fractional low order moments. In *Proceedings of International Conference on Acoustics, Speech and Signal Processing*, Volume IEEE ICASSP 2001, pp. 3957–3960.

Fahs, J. and I. Abou-Faycal (2018, March). Information measures, inequalities and performance bounds for parameter estimation in impulsive noise environments. *IEEE Transactions on Information Theory 64*(3), 1825–1844.

Fallahgoul, H. and G. Loeper (2019, Apr). Modelling tail risk with tempered stable distributions: an overview. *Annals of Operations Research*.

Fama, E. (1971). Risk, return and equilibrium. *The Journal of Political Economy 79*, 30–55.

Fama, E. and R. Roll (1968). Some properties of symmetric stable distributions. *JASA 63*, 817–83.

Fama, E. and R. Roll (1971). Parameter estimates for symmetric stable distributions. *Journal of the American Statistical Association 66*, 331–338.

Fama, E. F. (1963). Mandelbrot and the stable Paretian hypothesis. *Journal of Business 36*, 420–429.

Fama, E. F. (1965). The behavior of stock market prices. *Journal of Business 38*, 34–105.

Fama, E. F. and M. H. Miller (1972). *The Theory of Finance*. N.Y., N.Y.: Holt, Rinehart and Winston.

Fan, Z. (2001). *Estimation problems for distributions with heavy tails*. Ph. D. thesis, Universität zu Göttigen.

Fan, Z. (2004). Estimation problems for distributions with heavy tails. *Journal of Statistical Planning and Inference 123*, 13–40.

Fan, Z. (2006a). Parameter estimation of stable distributions. *Communications in Statistics: Theory and Methods 35*, 245–255.

Fan, Z. (2006b). Semi-stable distributions in free probability theory. *Sci. China Ser. A 49*(3), 387–397.

Fan, Z. (2009). Minimum-distance estimator for stable exponent. *Comm. Statist. Theory Methods 38*(3-5), 511–528.

Fang, C., Y. Lu, T. Gao, and J. Duan (2022). An end-to-end deep learning approach for extracting stochastic dynamical systems with α-stable Lévy noise. *Chaos: An Interdisciplinary Journal of Nonlinear Science 32*(6), 063112.

Fang, K.-T., S. Kotz, and K. W. Ng (1990). *Symmetric multivariate and related distributions*. New York : Chapman and Hall.

Farina, A., F. Gini, M. V. Greco, and L. Verrazzani (1997). High resolution sea clutter data: statistical analysis of recorded live data. *IEE Proceedings - Radar, Sonar, Navig. 144*(3), 121–130. online no. 19971107.

Farmer, J. D. and J. Geanakoplos (2005). Power laws in economics and elsewhere. Technical report, Santa Fe Institute.

Farsad, N., W. Guo, C. Chae, and A. Eckford (2015, Dec). Stable distributions as noise models for molecular communication. In *2015 IEEE Global Communications Conference (GLOBECOM)*, pp. 1–6.

Farsad, N., Y. Murin, W. Guo, C. B. Chae, A. Eckford, and A. Goldsmith (2016, Dec). On the impact of time-synchronization in molecular timing channels. In *2016 IEEE Global Communications Conference (GLOBECOM)*, pp. 1–6.

Farsad, N., Y. Murin, W. Guo, C.-B. Chae, A. Eckford, and A. Goldsmith (2018, 12). Communication system design and analysis for asynchronous molecular timing channels. arXiv:1812.04476v1.

Fasshauer, G. (2011, January). Positive definite kernels: Past, present and future. pp. 1–48.

Favaro, S., S. Fortini, and S. Peluchetti (2022, 06). Neural tangent kernel analysis of shallow α-stable relu neural networks. http://arxiv.org/abs/2206.08065v1.

Feigin, P. and S. Resnick (1996). Pitfalls of fitting autoregressive models for heavy-tailed time series. Available at http://www.orie.cornell.edu/trlist/trlist.html as TR1163.ps.Z.

Feigin, P. D. and E. Yashchin (1983). On a strong Tauberian result. *Z. Wahrscheinlichkeitstheorie verw. Gebiete 65*, 35–48.

Feldheim, E. (1937). *Etude de la stabilité des lois de probabilité*. Ph. D. thesis, Faculté des Sciences de Paris, Paris, France.

Feller, W. (1943a). The general form of the so-called law of the iterated logarithm. *Trans. Amer. Math. Soc. 54*, 373–402.

Feller, W. (1943b). The general form of the so-called law of the iterated logarithm. *Trans. Amer. Math. Soc. 54*, 373–402.

Feller, W. (1946a). The law of the iterated logarithm for identically distributed random variables. *Ann. of Math. (2) 47*, 631–638.

Feller, W. (1946b). A limit theorem for random variables with infinite moments. *Amer. J. Math. 68*, 257–262.

Feller, W. (1952). On a generalization of Marcel Riesz' potentials and the semi-groups generated by them. In *Comm. Sém. Math. Univ. Lund, Tome Supplémentaire Dédié à Marcel Riesz*, pp. 74–81. Gauthier-Villars, Paris.

Feller, W. (1968). *An Introduction to Probability Theory and its Applications* (3rd ed.), Volume 1. Wiley, New York.

Feller, W. (1971). *An Introduction to Probability Theory and its Applications* (2nd ed.), Volume 2. Wiley, New York.

Ferguson, T. (1996). *A Course in Large Sample Theory*. Chapman and Hall, London.

Ferguson, T. and M. Klass (1972). A representation theorem of independent increment processes without Gaussian component. *Ann. Math. Statist. 43*, 1634–1643.

Ferguson, T. S. (1962). A representation of the symmetric bivariate Cauchy distribution. *The Annals of Mathematical Statistics 33*(4), pp. 1256–1266.

Ferguson, T. S. (1978). Maximum likelihood estimates of the parameters of the Cauchy distribution for samples of size 3 and 4. *Journal of the American Statistical Association 73*(361), pp. 211–213.

Fernández, C., J. Osiewalski, and M. F. J. Steel (1995). Modeling and inference with v-spherical distributions. *Journal of the American Statistical Association 90*(432), 1331–1340.

Fernandez, V. (2003). Extreme value theory: Value at risk and returns dependence around the world. Documentos de Trabajo 161, Centro de Economía Aplicada, Universidad de Chile.

Fernique, X. (1974). Une démonstration simple du théorème de R.M. Dudley et M. Kanter sur les loi 0-1 pour les mesures stables. In *Lecture Notes in Mathematics, Vol. 381*, pp. 78–79. Springer Verlag.

Fernique, X. (1975). Regularité des trajectoires des fonctions aléatoires gaussiennes. In *Lecture Notes in Mathematics, Vol. 480*, New York, pp. 1–96. Springer Verlag.

Fernique, X. (1985). Les vecteurs aléatoires gaussiens et leurs espaces autoreproduisants. Technical Report 34, Technical Report Series of the Laboratory for Research in Statistics and Probabability, University of Ottawa.

Feuerverger, A. and P. McDunnough (1981a). On efficient inference in symmetric stable laws and processes. In M. Csörgö, D. A. Dawson, N. J. K. Rao, and A. K. Saleh (Eds.), *Statistics and Related Topics*, pp. 109–122. Amsterdam: North-Holland.

Feuerverger, A. and P. McDunnough (1981b). On the efficiency of empirical characteristic function procedures. *J. Roy. Stat. Soc, ser. B 43*, 20–27.

Feuerverger, A. and R. A. Mureika (1977). The empirical characteristic function and its applications. *Annals of Statistics 5*, 88–97.

Fialkowski, J. and R. Gauss (2010, April). Methods for identifying and controlling sonar clutter. *Oceanic Engineering, IEEE Journal of 35*(2), 330–354.

Fialkowski, J., R. Gauss, and D. Drumheller (2004, April). Measurements and modeling of low-frequency near-surface scattering statistics. *Oceanic Engineering, IEEE Journal of 29*(2), 197–214.

Fiche, A. (2012, November). *Alpha-stable distributions for the characterization of random phenomena observed by sensors in a marine environment.* Ph. D. thesis, Université De Bretagne Occidentale.

Fiche, A., J.-C. Cexus, A. Martin, and A. Khenchaf (2013). Features modeling with an α-stable distribution: Application to pattern recognition based on continuous belief functions. *Information Fusion 14*, 504–520.

Fielitz, B. D. and J. P. Rozelle (1983). Stable distributions and the mixtures of distributions hypotheses for common stock returns. *Journal of the American Statistical Association 78*, 28–36.

Finch, S. (2007, June). Continued fraction transformation ii. Unpublished.

Fischer, H. (2011). *A History of the Central Limit Theorem*. NY, NY: Springer.

Fisher, R. A. (1929). Tests of significance in harmonic analysis. *Proceedings of the Royal Statistical Society, Series A 125*, 54–59.

Fisher, R. A. and L. H. C. Tippett (1928). Limiting forms of the frequency distribution of the largest or smallest member of a sample. *Proc. Cambridge Philos. Soc. 24*, 180–190.

Fix, E. (1949). Distributions which lead to linear regression. In *Proceedings of the Berkeley Symposium on Mathematical Statistics and Probability 1945-46*, Berkeley. University of California Press.

Fix, M. J., D. S. Cooley, and E. Thibaud (2021). Simultaneous autoregressive models for spatial extremes. *Environmetrics 32*(2), e2656.

Flandrin, P. (1989a). On the spectrum of fractional Brownian motions. *IEEE Trans. on Info. Theory IT-35*(1), 197–199.

Flandrin, P. (1989b). Some aspects of nonstationary signal processing with emphasis on time-frequency and time-scale methods. In J. Combes, A. Grossman, and P. Tchamitchian (Eds.), *Wavelets*, pp. 68–98. Springer-Verlag.

Flandrin, P. (1989c). Time-dependent spectra for nonstationary stochastic process. In G. Longo and B. Picinbono (Eds.), *Time and frequency representation of signals and systems*, pp. 69–124. Springer-Verlag.

Flandrin, P. (1990). Scale-invariant Wigner spectra and self-similarity. In L. TGorres, E. Masgrau, and M. Lagunas (Eds.), *Signal Processing V: Theories and Applications*, pp. 149–152. Elsevier.

Flandrin, P. (1991). Fractional Brownian motion and wavelets. In M. Farge, J. Hung, and J. Vassilicos (Eds.), *Fractals and Fourier Transforms-New Developments and New Applications*. Oxford University Press.

Flandrin, P. (1992a). Time-scale analyses and self-similar stochastic processes. In *Proceedings of the NATO Advanced Study Institute on "Wavelets and their Applications," Il Ciocio (Italy)*.

Flandrin, P. (1992b). Wavelet analysis and synthesis of fractional Brownian motion. *IEEE Trans. on Info. Theory IT-38*(2), 910–917.

Flandrin, P. and O. Rioul (1990). Affine smoothing of the Wigner-Ville distribution. In *IEEE Int. Conf. on Acoust., Speech and Signal Proc.*, Albuquerque (NM), pp. 2455–2458. ICASSP-90.

Fleischmann, K. and L. Mytnik (2003). Competing species superprocesses with infinite variance. *Electron. J. Probab. 8*, no. 8, 59 pp. (electronic).

Fofack, H. and J. P. Nolan (1999). Tail behavior, modes and other characteristics of stable distributions. *Extremes 2*(1), 39–58.

Fofack, H. and J. P. Nolan (2001). Distribution of parallel exchange rates in African countries. *J. Intl. Money and Finance 20*, 987–1001.

Folland, G. B. (1999). *Real Analysis: Modern Techniques and Their Applications* (2nd ed.). New York: Wiley Inter-Science.

Folland, G. B. (2001). How to integrate a polynomial over a sphere. *The American Mathematical Monthly 108*(5), 446–448.

Föllmer, H. and M. Schweizer (1993). A microeconomic approach to diffusion models for stock prices. *Math. Finance 3*, 1–23.

Fontaine, M., K. Sekiguchi, A. Nugraha, and K. Yoshii (2020, 12). Unsupervised robust speech enhancement based on alpha-stable fast multichannel nonnegative matrix factorization.

Forister, M. L., V. Novotny, A. K. Panorska, L. Baje, Y. Basset, P. T. Butterill, L. Cizek, P. D. Coley, F. Dem, I. R. Diniz, P. Drozd, M. Fox, A. E. Glassmire, R. Hazen, J. Hrcek, J. P. Jahner, O. Kaman, T. J. Kozubowski, T. A. Kursar, O. T. Lewis, J. Lill, R. J. Marquis, S. E. Miller, H. C. Morais, M. Murakami, H. Nickel, N. A. Pardikes, R. E. Ricklefs, M. S. Singer, A. M. Smilanich, J. O. Stireman, S. Villamarín-Cortez, S. Vodka, M. Volf, D. L. Wagner, T. Walla, G. D. Weiblen, and L. A. Dyer (2015). The global distribution of diet breadth in insect herbivores. *Proceedings of the National Academy of Sciences 112*(2), 442–447.

Forsström, M. P. and J. E. Steif (2020, 07). A formula for hidden regular variation behavior for symmetric stable distributions. *Extremes*.

Fortus, M. (1983). Canonical correlations and canonical functionals for a stationary random process with a power spectral density. *Soviet Math. Doklady 28*(1), 280–283.

Fougères, A.-L. (2004). *Extreme Values in Finance, Telecommunications, and the Environment*, Volume 99 of *Monographs on Statistics and Applied Probability*, Chapter Multivariate Extremes. Chapman and Hall/CRC.

Fougeres, A.-L. and C. Mercadier (2012). Risk measures and multivariate extensions of Breiman's theorem. *Journal of Applied Probability 49*(2), 364–384.

Fougères, A.-L., C. Mercadier, and J. P. Nolan (2013). Dense classes of multivariate extreme value distributions. *J. Multivariate Analysis 116*, 109–129.

Fougères, A.-L., C. Mercadier, and J. P. Nolan (2023). Semi-parametric estimation of multivariate extreme value distributions. In progress.

Fougéres, A.-L., J. P. Nolan, and H. Rootzén (2009). Models for dependent extremes using stable mixtures. *Scandanavian Journal of Statistics 36*, 42–59.

Fox, C. (1961). The G and H-functions as symmetrical Fourier kernels. *Trans. Amer. Math. Soc. 98*, 395–429.

Fox, R. and M. S. Taqqu (1985). Non-central limit theorems for quadratic forms in random variables having long-range dependence. *Annals of Probability 13*, 428–446.

Fox, R. and M. S. Taqqu (1986). Large-sample properties of parameter estiamtes for strongly dependent stationary Gaussian time series. *Annals of Statistics 14*, 517–532.

Fox, R. and M. S. Taqqu (1987a). Central limit theorems for quadratic forms in random variables having long-range dependence. *Prob. Th. and Rel. Fields 24*, 213–240.

Fox, R. and M. S. Taqqu (1987b). Multiple stochastic integrals with dependent integrators. *Journal of Multivariate Analysis 21*, 105–127.

Fraiman, R., L. Moreno, and T. Ransford (2023). A Cramér–Wold theorem for elliptical distributions. *Journal of Multivariate Analysis*, 105176.

Frain, J. C. (2007a). Maximum likelihood estimates of regression coefficients with alpha-stable residuals and day of week effects in total returns on equity indices. Trinity Economics Papers TEP-0108, Trinity College Dublin, Department of Economics.

Frain, J. C. (2007b). Small sample power of tests of normality when the alternative is an α-stable distribution. Trinity Economics Papers TEP-0207, Trinity College Dublin, Department of Economics.

Frain, J. C. (2008). Value at Risk (VaR) and the α-stable distribution. Trinity Economics Papers TEP-0308, Trinity College Dublin, Department of Economics.

Frain, J. C. (2009). *Studies on the Application of the α-stable Distribution in Economics*. Ph. D. thesis, Department of Economics, University of Dublin.

Franke, B. and T. Saigo (2009). The extremes of random walks in random sceneries. *Advances in Applied Probability 41*(2), 452–468.

Freedman, D. (1983). *Markov Chains*. New York: Springer-Verlag.

Freedman, D. and D. Lane (1980). The empirical distribution of fourier coefficients. *Annals of Statistics 8*, 1244–1251.

Freedman, D. and D. Lane (1981). The empirical distribution of the fourier coefficients of a sequence of independent, identically distributed long–tailed random variables. *Zeitschrift für Wahrscheinlichkeitstheorie und verwandte Gebiete 58*, 21–39.

Freeman, M. P. and G. Chisham (2005). On the probability distributions of SuperDARN Doppler spectral width measurements inside and outside the cusp. *Geophysical Research Letters 31*, doi:10.1029/2003GL019074.

Friedland, O. and O. Guédon (2011). Random embedding of ℓ_p^n into ℓ_r^n. *Mathematische Annalen 350*(4), 953–97.

Fries, S. (2018, May). Conditional moments of anticipative α-stable markov processes. *ArXiv e-prints*.

Frisch, U., P. Sulem, and M. Nelkin (1978). A simple dynamical model of intermittent fully developed turbulence. *J. Fluid Mech. 87*, 719–736.

Fristedt, B. (1974). Sample functions of stochastic processes with stationary independent increments. *Advances in Probability 3*. Marcel Dekker.

Fritsch, F. N. (1982). PCHIP final specifications, Report UCID–30194. Technical report, Lawrence Livermore National Laboratory.

Fritsch, F. N. and J. Butland (1984). A method for constructing local monotone piecewise cubic interpolants. *SIAM J. Sci. Stat. Computing 5*(2), 300–304.

Fritsch, F. N. and R. E. Carlson (1980). Monotone piecewise cubic interpolation. *SIAM J. Num. Anal. 17*, 238–246.

Frostman, O. (1935). Potentiel d'équilibre et capacitié des ensembles, avec quelques applications a la théorie des fonctions. *Medd. Lunds University Mat. Semin. 3*.

Fryer, D., M. Li, and A. Olenko (2019, Jul). rcosmo: R Package for Analysis of Spherical, HEALPix and Cosmological Data. *arXiv e-prints*, arXiv:1907.05648.

Fuchs, A., A. Joffe, and J. Teugels (2001). Expectation of the ratio of the sum of squares to the square of the sum: exact and asymptotic results. *Theory of Probability and Its Applications 46*(2), 243–255.

Gabaix, X. (2009). Power laws in economics and finance. *Annual Review of Economics 1*, 255–293.

Gabriel, K. R. (1971). The biplot graphic display of matrices with application to principal component analysis. *Biometrika 58*(3), pp. 453–467.

Gache, N., P. Flandrin, and D. Garreau (1991). Fractal dimension estimators for fractional Brownian motions. In *IEEE Int. Conf. on Acoust., Speech and Signal Proc.*, Toronto, pp. 3557–3560. ICASSP-91.

Gadrich, T. and R. Adler (1993). Parameter estimation for ARMA processes with symmetric stable innovations. Preprint.

Gaidai, O., X. Xu, A. Naess, Y. Cheng, R. Ye, and J. Wang (2020). Bivariate statistics of wind farm support vessel motions while docking. *Ships and Offshore Structures 0*(0), 1–9.

Gallardo, J. (2000). *Fractional stable noise processes and their application to traffic models and fast simulation of broadband telecommunications networks.* PhD thesis, George Washington University, Dept. Electrical and Computer Engineering, Washington, DC, USA.

Gammaitoni, L., P. Hänggi, P. Jung, and F. Marchesoni (1998, Jan). Stochastic resonance. *Rev. Mod. Phys. 70*, 223–287.

Gangolli, R. (1967). Lévy's brownian motion of several parameters. *Annales de l'Institut Henri Poincaré 3B*, 121–226.

Gao, F. and X. Liu (2020, March). Revisiting the distributions of Jupiter's irregular moons: II. orbital characteristics. *arXiv e-prints*, arXiv:2003.04851.

Gao, M., G. Yu, and T. Wang (2019, 05). Impulsive gear fault diagnosis using adaptive morlet wavelet filter based on alpha-stable distribution and kurtogram (january 2019). *IEEE Access PP*, 1–1.

Gao, Z. and S. Stoev (2018, Nov). Fundamental limits of exact support recovery in high dimensions. *arXiv e-prints*, arXiv:1811.05124.

Garcia, R., E. Renault, and D. Veredas (2006). Estimation of stable distributions by indirect inference. Preprint, available at SSRN: http://ssrn.com/abstract=795366.

Garcia, R., E. Renault, and D. Veredas (2011). Estimation of stable distributions by indirect inference. *Journal of Econometrics 161*(2), 325 – 337.

Garel, B., L. d'Estampes, and D. Tjøstheim (2004). Revealing some unexpected dependence properties of linear combinations of stable random variables using symmetric covariation. *Comm. in Statistics: Theory and Methods 33*(4), 769–786.

Garel, B. and B. Kodia (2009). Signed symmetric covariation coefficient for alpha-stable dependence modeling. *Comptes Rendus Mathematique 347*(5-6), 315 – 320.

Garel, B. and B. Kodia (2010, June). Signed symmetric covariation coefficient and g.a.p. for alpha-stable dependence modeling. estimation and comparison. Preprint, Université Toulouse.

Garel, B. and B. Kodia (2014). Estimation and comparison of signed symmetric covariation coefficient and generalized association parameter for alpha-stable dependence modeling. *Communication in Statistics 54*, 252–276.

Garel, B. and J.-C. Massé (2009). Calculation of the Prokhorov distance by optimal quantization and maximum flow. *AStA Advances in Statistical Analysis 93*, 73–88. 10.1007/s10182-008-0082-1.

Garsia, A. and J. Lamperti (1963). A discrete renewal theorem with infinite mean. *Commentarii Mathematici Helvetici 36*, 221–234.

Gattenlöhner, S., I. V. Gornyi, P. M. Ostrovsky, B. Trauzettel, A. D. Mirlin, and M. Titov (2016, Jul). Lévy flights due to anisotropic disorder in graphene. *Phys. Rev. Lett. 117*, 046603.

Gatto, R. and S. R. Jammalamadaka (2003). Inference for wrapped symmetric alpha stable circular models. *Sanhkya 65*, 333–355.

Gautschi, W. (1979). Algorithm 542: Incomplete gamma functions. *ACM Trans. on Math. Softw 5*, 482–489.

Gaver, D. P., P. A. Jacobs, and E. A. Seglie (2004). Reliability growth by "Test-Analyze-Fix-Test" with Bayesian and success-run stopping rules. Technical report, Naval Postgraduate School.

Gawronski, W. (1984). On the bell-shape of stable densities. *Ann. Prob. 12*, 230–242.

Gawronski, W. (1988). Asymptotoic forms for the derivatives of one-sided stable laws. *Ann. Prob. 16*, 1348–1364.

Gawronski, W. and M. Wiessner (1992). Asymptotics and inequalities for the mode of stable laws. *Statistics and Decisions 10*, 183–197.

Gaynor, G., E. Y. Chang, S. L. Painter, and L. Paterson (2000). Application of lévy random fractal simulation techniques in modelling reservoir mechanisms in the kuparuk river field, north slope, alaska. *SPE Reservoir Eval. and Eng. 3*(3), 263–271.

Gel, Y. R., W. Miao, and J. L. Gastwirth (2007, February). Robust directed tests of normality against heavy-tailed alternatives. *Comput. Stat. Data Anal. 51*(5), 2734–2746.

Geluk, J. L. and L. de Haan (1987). *Regular variation, extensions and Tauberian theorems*. AMSTERDAM: CWI Tract 40.

Geluk, J. L. and L. de Haan (2000). Stable probability distributions and their domains of attraction: a direct approach. *Prob. and Math. Stat. 20*(1), 169–188.

Geluk, J. L. and L. Peng (2000). Second order regular variation and the domain of attraction of stable distributions. *Analysis 20*, 359–371.

Geluk, J. L., L. Peng, and C. G. de Vries (2000). Convolutions of heavy-tailed random variables and applications to portfolio diversifcation and MA(1) times series. *Adv. Appl. Prob. 32*, 1011–1026.

Geman, D. and J. Horowitz (1973). Occupation times for smooth stationary processes. *The Annals of Probability 1*, 131–137.

Gencağa, D., E. Kuruoğlu, A. Ertüzün, and S. Yildirim (2008). Estimation of time-varying AR sαs processes using gibbs sampling. *Signal Processing 88*(10), 2564–2572. cited By 4.

Gençağa, D., A. Ertüzün, and E. E. Kuruoğlu (2008, May). Modeling of non-stationary autoregressive alpha-stable processes by particle filters. *Digit. Signal Process. 18*, 465–478.

Genest, C. and M. Scherer (2019). The world of vines. *Dependence Modeling 7*(1), 169–180. doi:10.1515/demo-2019-0008.

Gentleman, W. M. (1973). Least squres computations by givens transformations without square roots. *J. Inst. Maths Applics 12*, 329–336.

Genz, A. (1991). An adaptive numerical integration algorithm for simplices. In E. d. N. A. Shirwana and J. A. Kapenga (Eds.), *Computing in the 90s, Proceedings of the First Great Lakes Computer Science Conference*, Lecture Notes in Computer Science, pp. 279–292. Springer-Verlag. Volume 507.

Genz, A. (1993). Subdivision methods for adaptive integration over hyperspheres. In *Numerical integration, IV (Oberwolfach, 1992)*, Volume 112 of *Internat. Ser. Numer. Math.*, pp. 131–140. Birkhäuser, Basel.

Genz, A. and R. Cools (2003). An adaptive numerical cubature algorithm for simplices. *ACM Trans. Math. Software 29*(3), 297–308.

Georgiadis, A. (2000). *Adaptive Equalisation for Impulsive Noise Environments.* Ph. D. thesis, Univ. Edinburgh, Electrical & Electronics Engineering Dept.

Georgiadis, A. (2001). Adaptive bayesian decision feedback equaliser for alpha-stable noise environments. *Signal Processing Journal 81*(8), 1603=1623.

Georgiadis, A. (2005). Stochastic gradient algorithms for equalisation in alpha stable noise. *Signal Processing Journal 86*(4), 835–845.

Georgiou, P. G., P. Tsakalides, and C. Kyriakakis (1999). Alpha-stable modeling of noise and robust time- delay estimation in the presence of impulsive noise. *IEEE Transactions On Multimedia 1*(3), 291–301.

Ger, R., M. Keane, and J. K. Misiewicz (2000). On convolutions and linear combinations of pseudo-isotropic distributions. *J. Theoret. Probab. 13*(4), 977–995.

Gertsbakh, I. B. (1984). Asymptotic methods in reliability: a review. *Advances in Applied Probability 16*, 147–175.

Getoor, R. K. (1961). First passage times for symmetric stable processes in space. *Transactions of the American Mathematical Society 101*(1), 75–90.

Getoor, R. K. (1965). Some asymptotic formulas involving capacity. *Z. Wahrscheinlichkeitstheorie verw. Geb. 4*, 248–252.

Geweke, J. and S. Porter-Hudak (1983). The estimation and application of long memory time series models. *J. Time Series Analysis 4*, 221–238.

Ghannudi, H., L. C. N. Azzaoui, and P. A. Rolland (2010). Alpha-stable interference modeling and cauchy receiver for an IR-UWB ad hoc network. *IEEE Transactions on Communications To appear*.

Ghannudi, H. E., L. Clavier, and P. A. Rolland (2007). Modeling multiple access interference in ad hoc networks based on IR-UWB signals up-converted to 60 GHz. In *European Conference on Wireless Technologies*, pp. 106–109.

Ghatari, A., M. Aminghafari, and A. Mohammadpour (2023). A new type of LASSO regression model with Cauchy noise. *J. Agric, Biol. and Envir. Stat*. https://doi.org/10.1007/s13253-023-00583-w.

Ghosh, S. and S. Resnick (2010). A discussion on mean excess plots. *Stochastic Processes and their Applications 120*(8), 1492 – 1517.

Gilbert, A., S. Guha, P. Indyk, Y. Kotidis, S. Muthukrishnan, and M. Strauss (2002). Fast, small-space algorithms for approximate histogram maintenance. In *ACM Symposium on Theory of Computing 2002*.

Gilleland, E., M. Ribatet, and A. G. Stephenson (2013, 03). A software review for extreme value analysis. *Extremes 16*(1), 103–119.

Giné, E. and M. Hahn (1983). On stability of probability laws with univariate stable marginals. *Zeitschrift für Wahrscheinlichkeitstheorie und verwandte Gebiete 64*, 157–165.

Giné, E., V. Mandrekar, and J. Zinn (1979). On sums of independent random variables with values in $l_p\,(2 \leq p < \infty)$. In A. Beck (Ed.), *Probability in Banach Spaces 2*, Volume 707 of *Lecture Notes in Mathematics*, pp. 111–124. Springer–Verlag.

Ginovian, M. (1982). On the asymptotical estimation of the maximum likelihood of parameters of the spectrum of a stationary time series. In *Limit Theorems in Probability and Statistics*, Volume 36, pp. 457–497. Amsterdam: North-Holland.

Giraitis, L. (1983). On the convergence of some non-linear transformation of Gaussian sequences to self-similar processes. *Lithuanian Mat. Journal 23*(1), 31–39.

Giraitis, L. (1984). Asymptotic distribution of spectral estimates of Ito-Wiener integrals. *Lithuanian Mat. Journal 24*(3), 98–104.

Giraitis, L., S. A. Molchanov, and D. Surgailis (1993). Long memory shot noises and limit theorems with application to Burgers' equation. In *New directions in time series analysis, Part II*, Volume 46 of *IMA Vol. Math. Appl.*, pp. 153–176. New York: Springer.

Giraitis, L. and D. Surgailis (1984). A limit theorem for triangular array of symmetric statistics. In R. S. Krylov and A. Novikov (Eds.), *Statistics and Control of Stochastic Processes*, pp. 147–166. Steklov Seminar: New York: Optimization Software.

Giraitis, L. and D. Surgailis (1986). Multivariate Appell polynomials and the central limit theorem. In E. Eberlein and M. Taqqu (Eds.), *Dependence in Probability and Statistics*. New York: Birkhauser.

Giraitis, L. and D. Surgailis (1989). A limit theorem for polynomials of linear processes with long range dependence. *Lietuvos Matematikos Rinkinys 29*, 290–311.

Giraitis, L. and D. Surgailis (1990a). Clt for quadratic forms in strongly dependent linear variables and application to asymptotical normality of Whittle's estimate. *Prob. Th. Rel. Fields 86*.

Giraitis, L. and D. Surgailis (1990b). On shot noise processes with long range dependence. In B. Grigelionis, Y. Prohorov, V. Sazonov, and V. S. cius (Eds.), *Probability Theory and Mathematical Statistics. Proceedings of the Fifth Vilnius Conference June 25-July 1, 1989*, Utrecht, the Netherlands, pp. 401–408. VSP BV Press. Vol. 2.

Giri, P., A. Grzesiek, W. Żuławiński, S. Sundar, and A. Wylomanka (2022). The modified yule-walker method for multidimensional infinite-variance periodic autoregressive model of order 1. *J. Korean Stat. Soc.*. https://doi.org/10.1007/s42952-022-00191-3.

Gisselquist, R. (1973). A continuum of collision process limit theorems. *Ann. of Probab. 1*, 231–239.

Gjessing, H. K., O. O. Aalen, and N. L. Hjort (2003). Frailty models based on Lévy processes. *Adv. in Appl. Probab. 35*(2), 532–550.

Glen, A. G. (1998). *A probability programming language: Development and applications*. ProQuest LLC, Ann Arbor, MI. Thesis (Ph.D.)–The College of William and Mary.

Glen, A. G., D. L. Evans, and L. M. Leemis (2001). APPL: a probability programming language. *Amer. Statist. 55*(2), 156–166.

Glen, A. G., L. M. Leemis, and J. H. Drew (2004). Computing the distribution of the product of two continuous random variables. *Comput. Statist. Data Anal. 44*(3), 451–464.

Glowacki, O., G. B. Deane, and M. Moskalik (2018). The intensity, directionality, and statistics of underwater noise from melting icebergs. *Geophysical Research Letters 45*(9), 4105–4113.

Gnedenko, B. V. (1943). Sur la distribution limite du terme maximum d'une serie aleatoire. *Ann. Math. 44*, 423–453.

Gnedenko, B. V. and A. N. Kolmogorov (1954). *Limit distributions for sums of independent random variables*. Addison-Wesley.

Gneiting, T. (1997). Normal scale mixtures and dual probability densities. *Journal of Statistical Computation and Simulation 59*, 375–384.

Godsill, S. J. (1999). Mcmc and em-based methods for inference in heavy-tailed processes with alpha-stable innovations. In *IEEE Signal processing workshop on higher-order statistics*. IEEE.

Godsill, S. J. (2000). Inference in symmetric alpha-stable noise using mcmc and the slice sampler. In *IEEE International Conference on Acoustics, Speech and Signal Processing*, Volume VI, pp. 3806–3809. IEEE.

Godsill, S. J. and E. E. Kuruoğlu (1999). Bayesian inference for time series with heavy-tailed symmetric alpha-stable noise processes. In J. P. Nolan and A. Swami (Eds.), *Proceedings of the ASA-IMS Conference on Heavy Tailed Distributions*.

Godsill, S. J. and E. E. Kuruoğlu (1999, June). Bayesian inference for time series with heavy-tailed symmetric α-stable noise processes. In *Applications of Heavy Tailed Distributions in Economics, Engineering and Statistics*, Washington DC, USA.

Gogineni, V. C., S. P. Talebi, S. Werner, and D. P. Mandic (2020). Fractional-order correntropy filters for tracking dynamic systems in α-stable environments. *IEEE Transactions on Circuits and Systems II: Express Briefs 67*(12), 3557–3561.

Goldie, C. and C. Klüppelberg. Subexponential distributions. Tech. Univ. Munich Library. https://mediatum.ub.tum.de/doc/1120625/1120625.pdf.

Goldie, C. M. (1978). Subexponential distributions and dominated-variation tails. *Journal of Applied Probability 15*(2), 440–442.

Goldman, A. (1984). Estimations analytiques concernant the movement brownian fractionnaire à plusieurs parametres. *Comptes Rendus Acad. Sci. Paris I*(5), 91–93.

Gomes, C. and B. Selman (1999). Heavy-tailed distributions in computational methods. In J. P. Nolan and A. Swami (Eds.), *Proceedings of the ASA-IMS Conference on Heavy Tailed Distributions*.

Gomes, M., L. Canto e Castro, M. Fraga Alves, and D. Pestana (2008). Statistics of extremes for iid data and breakthroughs in the estimation of the extreme value index: Laurens de haan leading contributions. *Extremes 11*(1), 3–34.

Gomi, C. and Y. Kuzuha (2013). Simulation of a daily precipitation time series using a stochastic model with filtering. *Open Journal of Modern Hydrology 3*, 206–213.

Gomide, F. (1978). Markovian inputs and the Hurst phenomenon. *J. Hydrology 37*, 23–45.

Gonçalvès, P. and P. Flandrin (1992). Bilinear time-scale analysis applied to local scaling exponents estimation. In *IEEE International Conference on Wavelets and Applications*, Toulouse.

Gonçalves, E. N., R. M. Palhares, R. H. C. Takahashi, and R. C. Mesquita (2006, December). Algorithm 860: SimpleS – an extension of Freudenthal's simplex subdivision. *ACM Trans. Math. Softw. 32*, 609–621.

Gonçalvés, P. and R. Riedi (2005). Diverging moments and parameter estimation. *Journal of the American Statistical Association 100*(472), 1382–1393.

Gong, Y., P. Zhong, T. Opitz, and R. Huser (2022). Partial tail-correlation coefficient applied to extremal-network learning.

Gonzalez, J. (1997). *Robust Techniques for Wireless Communications in Non-Gaussian Environments*. PhD Electrical Engin., University of Delaware, USA.

Gonzalez, J. G., D. W. Griffith, and G. R. Arce (1997, July). Zero-order statistics: A signal processing framework for very impulsive processes. In *IEEE Signal Processing Workshop on Higher-Order Statistics, Banff, Alberta, Canada*. IEEE.

Gonzalez, J. G. and J. P. Nolan (2007). Stable filters. Technical Report.

Gonzalez, J. G., J. L. Paredes, and G. R. Arce (2006). Zero-order statistics: A mathematical framework for processing and characterization of very impulsive signals. *IEEE Trans. on Signal Processing 54*(10), 3839–3851.

González Cázares, J. I., F. Lin, and A. Mijatović (2023, 03). Fast exact simulation of the first passage of a tempered stable subordinator across a non-increasing function.

González-Estrada, E. and J. A. V. nor Alva (2010). A goodness-of-fit test for location-scale max-stable distributions. *Communications in Statistics - Simulation and Computation 39*(3), 557–562.

Gordon, N., J. Percival, and M. Robinson (2003). The Kalman-Levy filter and heavy-tailed models for tracking manoeuvring targets. In R. Raman and E. Panarella (Eds.), *Proceedings of the sixth International Conference on Information Fusion*, Volume 2, Cairns, Queensland, Australia, pp. 1024–1031. International Society of Information Fusion.

Gorenflo, R., G. De Fabritiis, and F. Mainardi (1999). Discrete random walk models for symmetric Lévy-Feller diffusion processes. In *Proceedings of the International Workshop on Econophysics and Statistical Finance (Palermo, 1998)*, Volume 269, pp. 79–89.

Gorenflo, R. and F. Mainardi (1998a). Fractional calculus and stable probability distributions. *Arch. Mech. 50*, 377–388.

Gorenflo, R. and F. Mainardi (1998b). Random walk models for space-fractional diffusion processes. *Fract. Calc. Appl. Anal. 1*(2), 167–191.

Gorenflo, R. and F. Mainardi (2001). *Problems in Mathematical Physics*, Chapter Random walk models approximating symmetric space-fractional diffusion processes, pp. 120–145. Boston: Birkhäuser Verlag.

Gorenflo, R., F. Mainardi, D. Moretti, G. Pagnini, and P. Paradisi (2002a). Discrete random walk models for space-time fractional diffusion. *Chemical Physics 284*, 521–541.

Gorenflo, R., F. Mainardi, D. Moretti, G. Pagnini, and P. Paradisi (2002b). Discrete random walk models for space–time fractional diffusion. *Chemical Physics 284*(1), 521–541. Strange Kinetics.

Gorenflo, R., F. Mainardi, D. Moretti, G. Pagnini, and P. Paradisi (2002c). Fractional diffusion: probability distributions and random walk models. *Phys. A 305*(1-2), 106–112. Non extensive thermodynamics and physical applications (Villasimius, 2001).

Gorenflo, R., F. Mainardi, and A. Vivoli (2007). Continuous time random walk and parametric subordination in fractional diffusion. To appear in Chaos, Solitons and Fractals, E-print ¡arXiv:condmat/0701126¿.

Gorji, F. and M. Aminghafari (2019). Robust nonparametric regression for heavy-tailed data. *Journal of Agricultural, Biological and Environmental Statistics*. doi:10.1007/s13253-019-00382-2.

Gorodetskii, V. (1977). On convergence to semi-stable Gaussian processes. *Theory of Probability and its Applications 22*, 498–508.

Górska, K., A. Horzela, K. A. Penson, and G. Dattoli (2013). The higher-order heat-type equations via signed Lévy stable and generalized Airy functions. *J. of Physics A: Mathematical and Theoretical 46*, 425001.

Górska, K. and K. A. Penson (2011). Lévy stable two-sided distributions: Exact and explicit densities for asymmetric case. *Physical Review E 83*(6), 061125.

Górska, K. and K. A. Penson (2012). Lévy stable distributions via associated integral transform. *J. Math. Phys. 53*, 053302.

Gottwald, G. A. and I. Melbourne (2016). On the detection of superdiffusive behaviour in time series. *Journal of Statistical Mechanics: Theory and Experiment 2016*(12), 123205.

Gouëzel, S. (2004). Central limit theorem and stable laws for intermittent maps. *Probab. Theory Related Fields 128*(1), 82–122.

Gouëzel, S. (2007). Statistical properties of a skew product with a curve of neutral points. *Ergodic Theory Dynam. Systems 27*(1), 123–151.

Gouriéroux, C. and J.-M. Zakoïan (2017). Local explosion modelling by noncausal process. *Journal of the Royal Statistical Society: Series B (Statistical Methodology) 79*(3), 737 – 756.

Grabchak, M. (2008, January). Maximum likelihood estimation of parametric tempered stable distributions on the real line with applications to finance. Master's thesis, Cornell, Ithaca, NY.

Grabchak, M. (2012). On a new class of tempered stable distributions: moments and regular variation. *Journal of Applied Probability 49*(4), 1015–1035.

Grabchak, M. (2015a). Inversions of Lévy measures and the relation between long and short time behavior of Lévy processes. *Journal of Theoretical Probability 28*(1), 184–197.

Grabchak, M. (2015b). On the consistency of the MLE for Ornstein-Uhlenbeck and other self-decomposable processes. *Statistical Inference for Stochastic Processes*, 1–22.

Grabchak, M. (2021, 01). On the transition laws of p-tempered

$$\alpha$$

-stable ou-processes. *Computational Statistics*.

Grabchak, M. and G. Samorodnitsky (2010). Do financial returns have finite or infinite variance? A paradox and an explanation. *Quantitative Finance 10*(8), 883–893.

Gradshteyn, I. and I. Ryzhik (2000). *Table of Integrals, Series, and Products*. Academic Press.

Graf, H. (1983). *Long-range correlations and estimation of the self-similarity parameter*. Ph. D. thesis, ETH Zurich, Zurich.

Graf, H., F. Hampel, and J. Tacier (1984). *The problem of unsuspected serial correlations*, Volume 26 of *Lecture Notes in Statistics*. Springer: New York: Springer: New York. 127-145.

Grafakos, L. and G. Teschl (2013). On Fourier transforms of radial functions and distributions. *J. Fourier Anal. Appl. 19*(1), 167–179.

Graff, R. A., A. Harrington, and M. Young (1997). The shape of Australian real estate return distributions and comparisons to the United States. *Journal of Real Estate Research 14*, 291–308.

Granger, C. (1980). Long memory relationships and aggregation of dynamic models. *J. Econometrics 14*, 227–238.

Granger, C. and R. Joyeux (1980). An introduction to long-memory time series and fractional differencing. *J. Time Series Analysis 1*, 15–30.

Granger, C. W. H. and D. Orr (1972). Infinite variance and research strategy in time series analysis. *JASA 67*, 275–285.

Gray, H., N. Zheng, and W. Woodward (1989). On generalized fractional processes. *Journal of Time Series Analysis 10*, 233–257.

Greene, M. and B. Fielitz (1977). Long-term dependence in common stock returns. *J. Financial Economics 4*, 339–349.

Greene, M. and B. Fielitz (1979). The effect of long-term dependence on risk return models of common stocks. *Operations Research 27*, 944–951.

Greenwood, J. A., J. M. Landwehr, N. C. Matalas, and J. R. Wallis (1979). Probability weighted moments: Definition and relation to parameters of several distributions expressable in inverse form. *Water Resources Research 15*(5), 1049–1054.

Greenwood, P. E. (1969). The variation of a stable path is stable. *Zeitschrift für Wahrscheinlichkeitstheorie und verwandte Gebiete 14*, 140–148.

Grenander, U. (1950). Stochastic processes and statistical inference. *Ark. Mat. 1*, 195–277.

Grenander, U. and G. Szego (1958). *Toeplitz forms and their applications*. New York: Chelsea.

Gretton, A., K. Borgwardt, M. J. Rasch, B. Scholkopf, and A. J. Smola (2008, May). A Kernel Method for the Two-Sample Problem. *arXiv e-prints*, arXiv:0805.2368.

Griffiths, D. J. and D. Z. Uvanović (2001). The charge distribution on a conductor for non-coulombic potentials. *American Journal of Physics 69*(4), 435–440.

Grinberg, E. and G. Zhang (1999). Convolutions, transforms, and convex bodies. *Proceedings of the London Mathematical Society 78*(1), 77–115.

Gross, A. (1994). Some mixing conditions for stationary symmetric stable stochastic processes. *Stoch. Proc. Appl. 51*, 277–295.

Gross, A. and J. Robertson (1993). Ergodic properties of random measures on stationary sequences of sets. *Stoch. Proc. Appl. 46*, 249–265.

Gross, A. and A. Weron (1995). On measure-preserving transformations and spectral representations of stationary symetric stable processes. *Studia Mathematica 114*, 275–287.

Grundmann, A. and H. M. Moller (1978, 04). Invariant integration formulas for the n-simplex by combinatorial methods. *SIAM Journal on Numerical Analysis 15*(2), 282–289.

Grzaślewicz, R. and J. K. Misiewicz (1996). Isometric embeddings of subspaces of L_α-spaces and maximal representation for symmetric stable processes. In *Functional analysis (Trier, 1994)*, pp. 179–182. Berlin: de Gruyter.

Grzesiek, A., K. Gasior, A. Wylomańska, and R. Zimroz (2021). Divergence-based segmentation algorithm for heavy-tailed acoustic signals with time-varying characteristics. *Sensors 21*(24).

Grzesiek, A., G. Sikora, M. Teuerle, and A. Wylomanska (2019). Spatio-temporal dependence measures for bivariate AR(1) models with α-stable noise. *Journal of Time Series Analysis n/a*(n/a).

Grzesiek, A., M. Teuerle, and W. Agnieszka (2019, 10). Cross-codifference for bidimensional VAR(1) time series with infinite variance. *Communications in Statistics - Simulation and Computation*, 1–26.

Guadagnini, A., S. P. Neuman, T. Nan, M. Riva, and C. L. Winter (2015). Scalable statistics of correlated random variables and extremes applied to deep borehole porosities. *Hydrology and Earth System Sciences 19*(2), 729–745.

Guadagnini, A., S. P. Neuman, M. G. Schaap, and M. Riva (2013). Anisotropic statistical scaling of vadose zone hydraulic property estimates near Maricopa, Arizona. *Water Resources Research 49*(12), 8463–8479.

Guadagnini, A., S. P. Neuman, M. G. Schaap, and M. Riva (2014). Anisotropic statistical scaling of soil and sediment texture in a stratified deep vadose zone near Maricopa, Arizona. *Geoderma 214–215*, 217–227.

Guarcello, C., D. Valenti, A. Carollo, and B. Spagnolo (2016). Effects of Lévy noise on the dynamics of sine-gordon solitons in long Josephson junctions. *J. Stat. Mech.: Theory Exp. 2016*(5), 054012.

Guarcello, C., D. Valenti, B. Spagnolo, V. Pierro, and G. Filatrella (2017). Anomalous transport effects on switching currents of graphene-based Josephson junctions. *Nanotechnology 28*(13), 134001.

Guerbaz, R. (2009). On moduli of continuity for local times of fractional stable processes. *J. Theoret. Probab. 22*(4), 934–954.

Guerngar, N., E. Nane, R. Tinatztepe, S. Ulusoy, and H. W. V. Wyk (2020, February). Simultaneous inversion for the fractional exponents in the space-time fractional diffusion equation. Preprint.

Guillaume, D., M. Dacorogna, R. Davé, U. Müller, R. Olsen, and O. Pictet (1994). From the bird's eye to the microscope: a survey of new stylized facts of the intra-daily foreign exchange markets. A discussion paper by the O& A Research Group.

Guivarc'h, Y. and E. Le Page (2008). On spectral properties of a family of transfer operators and convergence to stable laws for affine random walks. *Ergodic Theory Dynam. Systems 28*(2), 423–446.

Gulian, M., M. Raissi, P. Perdikaris, and G. Karniadakis (2018, August). Machine Learning of Space-Fractional Differential Equations. *arXiv e-prints*, arXiv:1808.00931.

Gumbel, E. J. (2004). *Statistics of extremes*. Dover Publications, Inc., Mineola, NY. Reprint of the 1958 original, Columbia University Press, New York.

Günay, S. and A. Khaki (2018, 06). Best fitting fat tail distribution for the volatilities of energy futures: Gev, gat and stable distributions in garch and aparch models'. *Journal of Risk Management and Financial Management 11*, 1–19.

Güner, B., S. T. Rachev, D. Edelman, and F. J. Fabozzi (2010, August). Bayesian inference for hedge funds with stable distribution of returns. Working Paper 1, Karlsruher Institut für Technologie.

Gunning, J. (2002). On the use of multivariate levy-stable random field models for geological heterogeneity. *Mathematical Geology 34*(1), 43–62.

Guo, X., R. Li, W. Liu, and L. Zhu (2021). Stable correlation and robust feature screening. *Science China Mathematics*. https://doi.org/10.1007/s11425-019-1702-5.

Guo, X., J. Zhang, and Y. Fang (2020). Regression function comparison for paired data. *J System Science and Complexity TBD*. https://doi.org/10.1007/s11424-020-8372-0.

Gupta, A. K., K. Jagannathan, T. T. Nguyen, and D. N. Shanbhag (2006). Characterizations of stable laws via functional equations. *Math. Nachr. 279*(5-6), 571–580.

Gupta, A. K., T. T. Nguyen, and W. B. Zeng (1993). On a conditional Cauchy functional equation of several variables and a characterization of multivariate stable distributions. *Internat. J. Math. Math. Sci. 16*(1), 165–168.

Gupta, V. K. and E. Waymire (1990). Multiscaling properties of spatial rainfall and river flow distributions.

Gurrola-Ramos, J., A. Hernández-Aguirre, and O. Dalmau-Cedeño (2020). COLSHADE for real-world single-objective constrained optimization problems. In *2020 IEEE Congress on Evolutionary Computation (CEC)*, pp. 1–8.

Gusarov, G. G. (1998). *Mathematical modelling of random point distributions with large-scale correlations of fractal type*. Ph.D. Thesis, Ulyanovsk State University, Russia. In Russian.

Haan, L., C. Mercadier, and C. Zhou (2016). Adapting extreme value statistics to financial time series: dealing with bias and serial dependence. *Finance & Stochastics 20*(2), 321 – 354.

Haas, G., L. Bain, and C. Antle (1970). Inference for the Cauchy distribution based on maximum likelihood estimators. *Biometrika 57*(2), pp. 403–408.

Haas, M., S. Mittnik, M. Paolella, and S. Stude (2005, November). Stable mixture GARCH models. Preprint, BundesBank November 2005 Conference.

Haas, M. and C. Pigorsch (2009). *Financial Economics, Fat-Tailed Distributions*, pp. 3404–3435. New York, NY: Springer New York.

Hagglund, K. and E. Axell (2019). Adaptive demodulation in class A impulse noise channels. In *2019 IEEE Global Communcation Conference*.

Hagglund, K. and E. Axell (2020, 05). Adaptive demodulation in symmetric alpha-stable impulse noise channels. In *2020 IEEE 91st Vehicular Technology Conference*, pp. 1–5.

Hahn, T. (2005, jun). Cuba—a library for multidimensional numerical integration. *Computer Physics Communications 168*(2), 78–95.

Hajjaji, O., S. Manou-Abi, and Y. Slaoui (2023, 09). Parameter estimation for stable distributions and their mixture. 10.21203/rs.3.rs-3372568/v1.

Hall, P. (1981a). A comedy of errors: the canonical form for a stable characteristic function. *Bull. London Math. Soc. 13*, 23–27.

Hall, P. (1981b). On the rate of convergence to a stable law. *J. London Math. Soc. 23*, 179–192.

Hall, P. (1981c). Two-sided bounds on the rate of convergence to a stable law. *Z. Wahrsch. Verw. Gebiete 57*, 349–364.

Hall, P. (1982). On some simple estimates of an exponent of regular variation. *J. Roy. Stat. Assoc. 44*, 37–42. Series B.

Hall, P. (1984). On unimodality and rates of convergence for stable laws. *London Math. Soc. (2) 30*, 371–384.

Hall, P. (1988). *Introduction to the Theory of Coverage Processes*. New York: Wiley.

Hall, P. and J. Hart (1989a). Convergence rates in density estimation for data from infinite-order moving average processes. Preprint.

Hall, P. and J. Hart (1989b). Nonparametric regression with long-range dependence. Preprint.

Hall, P. and N. Tajvidi (2002, 06). Permutation tests for equality of distributions in high-dimensional settings. *Biometrika 89*(2), 359–374.

Hall, W. J. and J. Wellner (1981). Mean residual life. In *Statistics and related topics (Ottawa, Ont., 1980)*, pp. 169–184. North-Holland, Amsterdam-New York.

Hallin, M., Y. Swan, T. Verdebout, and D. Veredas (2011). Rank-based testing in linear models with stable errors. *Journal of Nonparametric Statistics 23*(2), 305–320.

Hallin, M., Y. Swan, T. Verdebout, and D. Veredas (2013). One-step R-estimation in linear models with stable errors.

Hamdan, H. N. (2001). *Characterizing and approximating scale mixtures*. Ph. D. thesis, American University.

Hamdan, H. N. and J. P. Nolan (1999). Approximating variance mixtures of normals. In *Proceedings of Conference in Heavy Tailed Distributions in Economics, Engineering and Statistics*. American University. CD-ROM.

Hamdan, H. N. and J. P. Nolan (2004a). Approximating infinite scale mixtures. In A. C. Krinik and R. J. Swift (Eds.), *Stochastic Processes and Functional Analysis: A Volume of Recent Advances in Honor of M. M. Rao*, Volume 238, pp. 161 – 169. New York: Marcel Dekker.

Hamdan, H. N. and J. P. Nolan (2004b). Estimating the parameters of infinite scale mixtures or normals. In *Proceedings of the 36th Symposium on the Interface: Computing Science and Statistics*.

Hamdan, H. N., J. P. Nolan, D. Kristen, and M. Wilson (2005). Using scale mixtures of normals to model continuoulsy compounded returns. *Journal of Modern Applied Statistical Methods 4*(1), 214–226.

Hamedani, G. G., E. S. Key, and H. Volkmer (2004). Solution to a functional equation and its application to stable and stable-type distributions. *Statist. Probab. Lett. 69*(1), 1–9.

Hamlili, H., S. Kameche, and A. Abdelmalek (2018). A survey on impulsive noise models removal techniques based on adaptive filter in ECG signal. *2018 International Conference on Electronics, Control, Optimization and Computer Science (ICECOCS)*, 1–6.

Hamlili, H., S. Kameche, and A. Abdelmalek (2020). SαS noise suppression for OFDM wireless communication in Rayleigh channel. *International Journal of Electrical and Computer Engineering 10*(2), 2003–2010. http://doi.org/10.11591/ijece.v10i2.pp2003-2010.

Hampel, F. (1978). Modern trends in the theory of robustness. *Math. Operationsforsch. Statist. Ser. Statist. 9*(425-442).

Hampel, F. (1987, September). Data analysis and self-similar processes. In *Proceedings of the 46th Session of the International Statistical Institute*, Tokyo, Japan. International Statistical Institute.

Hampel, F., E. Ronchetti, P. Rousseeuv, and W. Staehl (1986). *Robust Statistics*. New York: Wiley.

Hanagal, D. D. (2011). *Modeling survival data using frailty models*. Boca Raton, FL: CRC Press.

Hannsgen, G. (2008, October). Do the innovations in a monetary VAR have finite variances? The Levy Economics Institute of Bard College.

Hannsgen, G. (2012). Infinite-variance, alpha-stable shocks in monetary SVAR. *International Review of Applied Economics 26*(6), 755–786. DOI: 10.1080/02692171.2012.686484.

Hannsgen, G. (2021, 01). A minimal probabilistic minsky model: 3d continuous-jump dynamics.

Hansen, B. G. (1988). On log-concave and log-convex infinitely divisible sequences and densities. *The Annals of Probability 16*(4), pp. 1832–1839.

Hao, P., O. Karakus, and A. Achim (2023, 05). Robust Kalman filters based on the sub-Gaussian α-stable distribution.

Haralick, R. M. (2xxx). The kernel trick. posted online.

Harang, F. and C. Ling (2021). Regularity of local times associated to Volterra-Lévy processes and path-wise regularization of stochastic differential equations. *Journal of Theoretical Probability*. https://doi.org/10.1007/s10959-021-01114-4.

Harchol-Balter, M. (1999). The effect of heavy-tailed job size distributions on computer system design. In J. P. Nolan and A. Swami (Eds.), *Proceedings of the ASA-IMS Conference on Heavy Tailed Distributions*.

Harchol-Balter, M. (2013). *Performance Modeling and Design of Computer Systems Queueing Theory in Action*. Cambridge, UK: Cambridge University Press.

Harchol-Balter, M., M. Crovella, and C. Murta (1998). On choosing a task assignment policy for a distributed server system. In *Proceedings of Performance Tools '98, Lecture Notes in Computer Science Vol 1469*, pp. 231–242. Springer.

Hardin, C. (1981). Isometries on subspaces of l^p. *Indiana Univ. Math. J. 30*, 449–465.

Hardin, C. (1982a). On the linearity of regression. *Zeitschrift für Wahrscheinlichkeitstheorie und verwandte Gebiete 61*, 293–302.

Hardin, C. (1982b). On the spectral representation of symmetric stable processes. *Journal of Multivariate Analysis 12*, 385–401.

Hardin, C., G. Samorodnitsky, and M. Taqqu (1991a). Non-linear regression of stable random variables. *The Annals of Applied Probability 1*, 582–612.

Hardin, C., G. Samorodnitsky, and M. Taqqu (1991b). Numerical computations of non-linear stable regression functions. In S. Cambanis, G. Samorodnitsky, and M. Taqqu (Eds.), *Stable Processes and Related Topics*, Volume 25 of *Progress in Probability*, Boston, pp. 143–180. Birkhäuser.

Hardin, C. D. (1984). Skewed stable variables and processes. Technical Report 79, Center for Stoch. Proc., University of North Carolina, Chapel Hill.

Hardin, Jr., C. D. (1985). A spurious Brownian motion. *Proc. Amer. Math. Soc. 93*(2), 350.

Hardin, Jr., C. D. and L. D. Pitt (1983). Integral invariants of functions and L^p isometries on groups. *Pacific J. Math. 106*(2), 293–306.

Hardy, M. (2003). *Investment Guarantees: Modeling and Risk Management for Equity-Linked Life Insurance*. Wiley.

Harris, T. (1965). Diffusion with collisions between particles. *J. Appl. Probability 2*, 323–338.

Harris, T. and H. Robbins (1953). Ergodic theory of markov chains admitting an infinite invariant measure. *Proc. Natl. Acad. Sci. 39*, 860–864.

Hashorva, E., S. A. Padoan, and S. Rizzelli (2017a, December). Multivariate Extremes Over a Random Number of Observations. *arXiv e-prints*, arXiv:1712.09577.

Hashorva, E., S. A. Padoan, and S. Rizzelli (2017b, December). Multivariate extremes over a random number of observations. *arXiv e-prints*, arXiv:1712.09577.

Hasofer, A. (1986). Distribution of the maximum of a Gaussian process by Monte Carlo. Tech. Report 147, Center for Stoch. Process, UNC Chapel Hill.

Hastie, T. and W. Stuetzle (1989). Principal curves. *Journal of the American Statistical Association 84*(406), pp. 502–516.

Haug, S., C. Kluppelberg, and G. Kuhn (2013). Copula structure analysis based on extreme dependence. *Preprint*. https://mediatum.ub.tum.de/doc/1182740/1182740.pdf.

Hauksson, H. A. and S. T. Rachev (2001). The GARCH-stable option pricing model. *Mathematical and Computer Modelling 34*, 1199–1212.

Hauser, R. and H. Matzinger (1995). Conditional distributions of stable vectors. In preparation.

Hawat, D., R. Bardenet, and R. Lachièze-Rey (2023). Repelled point processes with application to numerical integration. arxiv:2308.04825.

Hayes, B. (2001). Computing science: Randomness as a resource. *American Scientist 89*(4), 300–304.

Haynatzki, G. R., J. M. Gani, and S. T. Rachev (2000). A steady-state model for the spread of HIV among drug users. *Math. Comput. Modelling 32*(1-2), 181–195. Stochastic models in mathematical biology.

Hazod, W. and E. Siebert (2001). *Stable probability measures on Euclidean spaces and on locally compact groups*, Volume 531 of *Mathematics and its Applications*. Dordrecht: Kluwer Academic Publishers. Structural properties and limit theorems.

He, X., K. Yu, J.-P. Montillet, C. Xiong, T. Lu, S. Zhou, X. Ma, H. Cui, and F. Ming (2020, Oct). Gnss-ts-nrs: An open-source matlab-based gnss time series noise reduction software. *Remote Sensing 12*(21), 3532.

Heath, D., S. Resnick, and G. Samorodnitsky (1997). Patterns of buffer overflow in a class of queues with long memory in the input stream. *The Annals of Applied Probability 7*, 1021–1057.

Heath, D., S. Resnick, and G. Samorodnitsky (1998). Heavy tails and long range dependence in on/off processes and associated fluid models. *Mathematics of Operations Research 23*, 145–165.

Heath, D., S. Resnick, and G. Samorodnitsky (1999). How system performance is affected by the interplay of averages in a fluid queue with long range dependence induced by heavy tails. *Ann. Appl. Probab. 9*(2), 352–375.

Heathcote, C. R. (1977). The integrated squared error estimation of parameters. *Biometrika 64*, 255–264.

Heathcote, C. R. (1982). Linear regression by functional least squares. *Journal of Applied Probability* (Special Vol. 19A), 225–239. Essays in statistical science.

Heinrich, L. (1987). Rates of convergence in stable limit theorems for sums of exponentially ψ-mixing random variables with an application to metric theory of continued fractions. *Math. Nachr. 131*, 149–165.

Heinrich, L., F. Pukelsheim, and U. Schwingenschlögl (2004). Sante-Laguë's chi-square divergence for rounding probabilities and its convergence to a stable law. *Statistics and Decisions 22*, 43–59.

Heinrich, L. and W. Wolf (1993). On the convergence of U-statistics with stable limit distribution. *Journal of Multivariate Analysis 44*(2), 266 – 278.

Heinrich, T., J. Yang, and S. Dai (2020a, 12). Growth, development, and structural change at the firm-level: The example of the pr china.

Heinrich, T., J. Yang, and S. Dai (2020b). Growth, development, and structural change at the firm-level: The example of the pr china.

Heinrich, T., J. Yang, and S. Dai (2020, May). Levels of structural change: An analysis of China's development push 1998-2014. *arXiv e-prints*, arXiv:2005.01882.

Heinrich, T., J. Yang, and S. Dai (2021, 09). Levels of structural change. *Journal of Evolutionary Economics*, 1–52.

Held, L. (2020). The harmonic mean χ^2-test to substantiate scientific findings. *Journal of the Royal Statistical Society: Series C (Applied Statistics) 69*(3), 697–708.

Helland, K. and C. Van Atta (1978). The "Hurst phenomenon" in grid turbulence. *J. Fluid Mech. 85*(part 3), 573–589.

Hensley, D. (2000). The statistics of the continued fraction digit sum. *Pacific J. Math. 192*(1), 103–120.

Herranz, D., E. Kuruoğlu, and L. Toffolatti (2004). An α-stable approach to the study of the p(d) distribution of unresolved point sources in cmb sky maps. *Astronomy and Astrophysics 424*(3), 1081–1096. cited By 12.

Herrchen, M. P. (2001). *Stochastic Modeling of Dispersive Diffusion by Non-Gaussian Noise*. Ph.D. thesis, ETH, Zurich, Switzerland.

Hersh, R. and R. J. Griego (1969). Brownian motion and potential theory. *Scientific American 220*(3), 66–77.

Hesterberg, T. (2003). z-z plots. Private communication.

Hetman, P., B. Szabat, K. Weron, and D. Wodzinski (2003). On the Rajagopal relaxation-time distribution and its relationship to the Kohlrausch-Williams–Watts relaxation function. *Journal of Non-Crystalline Solids 330*(1–3), 66–74.

Heyde, C. C. (1969). On the maximum of sums of random variables and the supremum functional for stable processes. *J. Appl. Probability 6*, 419–429.

Heyde, C. C. and S. G. Kou (2004). On the controversy over tailweight of distributions. *Oper. Res. Lett. 32*(5), 399–408.

Higham, N. J. (2002). Computing the nearest correlation matrix - a problem from finance. *IMA Journal of Numerical Analysis 22*, 329–343.

Hill, B. (1975). A simple general approach to inference about the tail of a distribution. *Ann. Statist. 3*, 1163–1174.

Hill, B. M. (1974). The rank-frequency form of Zipf's law. *Journal of the American Statistical Association 69*(348), 1017–1026.

Hill, M. C. and C. R. Tiedeman (2007). *Effective groundwater model calibration.* Hoboken, New Jersey: Wiley.

Hiraba, S. (2003). Asymptotic estimates for densities of multi-dimensional stable distributions. *Tsukuba J. Math. 27*(2), 261–287.

Hitz, A., R. Davis, and G. Samorodnitsky (2017, July). Discrete Extremes. *arXiv e-prints*, arXiv:1707.05033.

Hlávka, Z., M. Husková, and S. Meintanis (2020). Change-point methods for multivariate time-series: paired vectorial observations. *Stat Papers 61*, 1351––1383. https://doi.org/10.1007/s00362-020-01175-3.

Ho, H. and T. Sun (1987). A central limit theorem for non-instantaneous filters of a stationary Gaussian process. *Journal of Multivariate Analysis 22*, 144–155.

Ho Dang, P. and T. G. Vo Thi (2020). Gaussian copula of stable random vectors and application. *Hacettepe Journal of Mathematics and Statistics 49*, 887 – 901.

Hoang, L. V. and E. Spodarev (2022). Non-ergodic statistics and spectral density estimation for stationary real harmonizable symmetric α-stable processes.

Hoeffding, W. (1948a). A Class of Statistics with Asymptotically Normal Distribution. *The Annals of Mathematical Statistics 19*(3), 293 – 325.

Hoeffding, W. (1948b). A non-parametric test of independence. *Ann. Math. Statistics 19*, 546–557.

Hoffmann-Jørgensen, J. (1973). Existence of a measurable modification of stochastic processes. *Z. Wahr. verw. Geb. 25*, 205–207.

Hoffmann-Jørgensen, J. (1994). Stable densities. *Theor. Prob. Appl. 38*, 350–355.

Hoffmann-Jørgensen, J., L. Shepp, and R. Dudley (1979). On the lower tail of gaussian seminorms. *The Annals of Probability 7*, 319–342.

Holt, D. and E. Crow (1973). Tables and graphs of the stable probability density functions. *J. of Research of the National Bureau of Standards 77B*, 143–198.

Holtsmark, J. (1919). Über die Verbreiterung von Spektrallinien. *Ann. der Physik 58*, 577–630.

Hong, Y. (1999). Hypothesis testing in time series via the empirical characteristic function: a generalized spectral density approach. *JASA 94*, 1201 – 1220.

Höpfner, R. (1998). Estimating a stability parameter: asymptotics and simulations. *Statistics 30*(4), 291–305.

Höpfner, R. and L. Rüschendorf (1999). Comparison of estimators in stable models. *Math. Comput. Modelling 29*(10-12), 145–160.

Hosking, J. (1981). Fractional differencing. *Biometrika 68*(1), 165–176.

Hosking, J. R. M., J. R. Wallis, and E. F. Wood (1985). Estimation of the generalized extreme-value distribution by the method of probability-weighted moments. *Technometrics 27*(3), 251–261.

Houdré, C. and R. Kawai (2006). On fractional tempered stable motion. *Stochastic Process. Appl. 116*(8), 1161–1184.

Houdré, C. and R. Kawai (2007). On layered stable processes. *Bernoulli 13*(1), 252–278.

Houdré, C. and P. Marchal (2004). On the concentration of measure phenomenon for stable and related random vectors. *Ann. Probab. 32*(2), 1496–1508.

Houdré, C. and P. Marchal (2008). Median, concentration and fluctuations for Lévy processes. *Stochastic Process. Appl. 118*(5), 852–863.

Houdré, C., P. Marchal, and P. Reynaud-Bouret (2008). Concentration for norms of infinitely divisible vectors with independent components. *Bernoulli 14*(4), 926–948.

Hougaard, P. (1986). A class of multivariate failure time distributions. *Biometrika 73*, 671–678.

Hougaard, P. (2000). *Analysis of Multivariate Survival Data*. Springer, New York.

Howlader, H. A. and G. Weiss (1988). On bayesian estimation of the Cauchy parameters. *Sankhya-: The Indian Journal of Statistics, Series B 50*(3), 350–361.

Hsing, T., J. Hüsler, and M. Leadbetter (1988). On the exceedance point process for a stationary sequence. *Probability Theory and Related Fields 78*, 97–112.

Hsing, T. and J. Teugels (1989). Extremal properties of shot noise processes. *Advances in Applied Probability 21*, 513–525.

Hsu, P. (1986). Brownian exit distribution of a ball. In *Seminar on stochastic processes, 1985 (Gainesville, Fla., 1985)*, Volume 12 of *Progr. Probab. Statist.*, pp. 108–116. Birkhäuser Boston, Boston, MA.

Hu, G., S. Gao, Y. Zhong, and C. Gu (2014). Random weighting estimation of stable exponent. *Metrika 77*(4), 451–468.

Hu, K., W. Xiong, J. He, C.-S. Leung, and H. C. So (2023). Maximum correntropy criterion with variable center for robust passive multistatic localization. *IEEE Signal Processing Letters 30*, 1407–1411.

Hu, Z. (2008). Moderate deviations for finite population Student's statistic. *J. Math. Anal. Appl. 343*(2), 672–680.

Huang, G. and Y. Zhu (2021). Robust localization in distributed MIMO radar using delay and angle measurements with impulsive noise robust TD/AOA localization in impulsive noise. *International Journal of Antennas and Propagation 2021*, 1–12. https://doi.org/10.1155/2021/1531234.

Huang, R., H. Zheng, and E. Kuruoglu (2013). Time-varying arma stable process estimation using sequential monte carlo. *Signal, Image and Video Processing 7*(5), 951–958.

Hudson, W. N. and J. D. Mason (1981). Operator-stable distributions on R^2 with multiple exponents. *Annals of Probability 9*(3), 482–489.

Hughes, B., M. Shlesinger, and E. Montroll (1981). Random walks with self-similar clusters. *Proc. Nat. Acad. Sci. USA 78*, 3287–3291.

Hughes, B. D. (1995). *Random Walks and Random Environments*, Volume 1. Oxford: Oxford University Press.

Hughes, B. D. (1996). *Random Walks and Random Environments*, Volume 2. Oxford: Oxford University Press.

Huillet, T., A. Porzio, and M. B. Alaya (2001). On Lévy stable and semistable distributions. *Fractals* (3), 347–364.

Hult, H. and F. Lindskog (2002). Multivariate extremes, aggregation and dependence in elliptical distributions. *Advances in Applied Probability 34*(3), 587–608.

Humphries, N. E., N. Queiroz, J. R. M. Dyer, N. G. Pade, M. K. Musyl, K. M. Schaefer, D. W. Fuller, J. M. Brunnschweiler, T. K. Doyle, J. D. R. Houghton, G. C. Hays, C. S. Jones, L. R. Noble, V. J. Wearmouth, E. J. Southall, and D. W. Sims (2010). Environmental context explains Lévy and Brownian movement patterns of marine predators. *Nature 465*, 1066–1069.

Humphries, N. E., H. Weimerskirch, N. Queiroz, E. J. Southall, and D. W. Sims (2012). Foraging success of biological lévy flights recorded in situ. *Proceedings of the National Academy of Sciences 109*(19), 7169–7174.

Hung, T. L. and P. T. Kien (2019). On the rates of convergence to symmetric stable laws for distributions of normalized geometric random sums. *Filomat 33*(10), 3073 – 3084.

Hunt, F. Y., J. F. Douglas, and J. Bemal (1995). Probabilistic computation of Poiseuille flow velocity fields. *J. Math. Phys. 36*(5). http://dx.doi.org/10.1063/1.531044.

Hunt, G. (1951). Random Fourier transforms. *Trans. Amer. Soc. Civil Engineers 116*, 770–808.

Hunt, G. A. (1958). Markoff processes and potentials III. *Illinois J. Math. 2*(2), 151–213.

Hurst, H. (1951). Long-term storage capacity of reservoirs. *Transactions of the American Society of Civil Engineers 116*, 770–808.

Hurst, H. (1956). Methods of using long-term storage in reservoirs. *Proceedings of the Institution of Civil Engineers, Part I 5*, 519–577.

Hurst, S. (1995). The characteristic function of the Student t distribution. Finanical Mathematics Research Report FMRR 006-95, Australian National University, School of Mathematical Sciences. http://wwwmaths.anu.edu.au/research.reports/srr/95/044/SRR95-044-scan.pdf.

Hurst, S. R., E. P. E., and S. T. Rachev (1999). Option pricing for a logstable asset price model. *Mathematical and Computer Modelling 29*, 105–119.

Huser, R. and A. C. Davison (2013, 02). Composite likelihood estimation for the Brown–Resnick process. *Biometrika 100*(2), 511–518.

Huskova, M., S. G. Meintanis, and C. Pretorius (2021). Tests for heteroskedasticity in transformation models. *Statistical Papers*, 1613–9798. https://doi.org/10.1007/s00362-021-01267-8.

Hušková, M., S. Meintanis, and C. Pretorius (2021). Tests for heteroskedasticity in transformation models. *Stat Papers*. https://doi.org/10.1007/s00362-021-01267-8.

Hyman, J. D., M. Dentz, A. Hagberg, and P. K. Kang (2019, Dec). Emergence of stable laws for first passage times in three-dimensional random fracture networks. *Phys. Rev. Lett. 123*, 248501.

Ibragimov, I. (1982). Hitting probability of a Gaussian vector with values in a hilbert space in a sphere of a small radius. *J. Soviet Math. 20*, 2164–2174.

Ibragimov, I. and K. Chernin (1959). On the unimodality of stable laws. *Theory Prob. Appl. 4*, 417–419.

Ibragimov, I. A. and Y. V. Linnik (1971). *Independent and stationary sequences of random variables*. Groningen: Wolters-Nordhoff.

Ibragimov, R. (2005, November). On the robustness of economic models to heavy-tailedness assumptions. Preprint, BundesBank November 2005 Conference.

Idan, M. and J. Speyer (2010). Cauchy estimation for linear scalar systems. *IEEE Transactions on Automatic Control 55*(6), 1329 –134.

Idan, M. and J. Speyer (2012a). State estimation for linear scalar dynamic systems with additive Cauchy noises: Characteristic function approach. *SIAM Journal on Control and Optimization 50*(4).

Idan, M. and J. Speyer (2013, Dec). Multivariate Cauchy estimator with scalar measurement and process noises. In *Decision and Control (CDC), 2013 IEEE 52nd Annual Conference on*, pp. 5016–5023.

Idan, M. and J. L. Speyer (2012b). State estimation for linear scalar dynamic systems with additive Cauchy noises: Characteristic function approach. *SIAM Journal on Control and Optimization 50*(4), 1971–1994.

Idan, M. and J. L. Speyer (2014). Multivariate Cauchy estimator with scalar measurement and process noises. *SIAM Journal on Control and Optimization 52*(2), 1108–1141.

IEEE (2010). *Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP 2010, 14-19 March 2010, Sheraton Dallas Hotel, Dallas, Texas, USA*. IEEE: IEEE.

IEEE (2011). *Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP 2011, May 22-27, 2011, Prague Congress Center, Prague, Czech Republic*. IEEE: IEEE.

Ilow, J. (1995). *Signal Processing in Alpha-Stable Noise Environments: Noise Modeling, Detection and Estimation*. Ph. D. thesis, University of Toronto, Canada. Dept. of Electrical Engineering and Computer Engineering.

Ilow, J. (1999). Blind channel identification with α-stable inputs based on the multivariate empirical characteristic function. In J. P. Nolan and A. Swami (Eds.), *Proceedings of the ASA-IMS Conference on Heavy Tailed Distributions*.

Ilow, J. and D. Hatzinakos (1997). Detection in alpha-stable noise environments based on prediction. *Int. J. of Adaptive Control and Signal Processing 17*(7).

Ilow, J. and D. Hatzinakos (1998a). Analytic alpha-stable noise modeling in a poisson field of interferers or scatters. *IEEE Trans. on Signal Processing 46*(6), 1601–1611.

Ilow, J. and D. Hatzinakos (1998b). Applications of the empirical characteristic function to estimation and detection problems. *Signal Processing 65*(2), 199–219.

Ilow, J., D. Hatzinakos, and A. N. Venetsanopoulos (1998, April). Performance of FH SS radio networks with interference modeled as a mixture of Gaussian and alpha-stable noise. *IEEE Trans. Commun. 46*(4), 509–520.

IMSL (1991). *IMSL User's Manual, Version 2.0*. Houston: IMSL.

Imtiaz, M. A., D. Starobinski, A. Trachtenberg, and N. Younis (2019, April). Churn in the bitcoin network: Characterization and impact. 2019 IEEE International Conference on Blockchain and Cryptocurrency (ICBC). DOI: 10.1109/BLOC.2019.8751297.

Indyk, P. (2000). Stable distributions, pseudorandom generators, embeddings and data stream computation. In *Proceedings of the 41st IEEE Symposium on Foundations of Computer Science*. IEEE Computer Society.

Inglot, T. (1979). An elementary approach to the zero-one laws for Gaussian measures. *Coll. Math. 40*, 319–325.

Isobe, E. and S. Sato (1983). Wiener-Hermite expansion of a process generated by an Itô stochastic differential equation. *J. Appl.Prob. 20*, 754–765.

Istas, J. (1991). Coefficients d'ondelettes d'un processus gaussien stationnaire. *Comptes Rendus Acad. Sc. Paris 312*, 893–896.

Itô, K. (1951). Multiple Wiener integral. *J. Math. Soc. Japan 3*, 157–169.

Itô, K. (1967). Spectral type of the shift transformation of differential processes with stationary increments. *Transactions of the American Mathematical Society 81*, 106–134.

Itô, K. (1969). *Stochastic Processes*, Volume 16. Aarhus University Lecture Notes Series.

Ito, K., Y. Kawano, and K. Kashima (2021). Privacy protection with heavy-tailed noise for linear dynamical systems. *Automatica 131*, 109732.

Itô, K. and N. Nisio (1968). On the oscillation functions of Gaussian processes. *Math. Scand. 22*, 209–223.

Jacobs, P. A. (1986). First passage times for combinations of random loads. *SIAM Journal on Applied Mathematics 46*, 643–656.

Jagers, P. (1975). *Branching processes with biological applications*. London: Wiley-Interscience [John Wiley & Sons]. Wiley Series in Probability and Mathematical Statistics—Applied Probability and Statistics.

Jain, N. (1971). A zero-one law for Gaussian processes. *Proceedings of the American Mathematical Society 29*, 585–587.

Jain, N. and G. Kallianpur (1972). Oscillation functions of a multiparameter Gaussian process. *Nagoya Math. 47*, 15–28.

Jakubowski, A. (1991). *Asymptotic Independent Representations for Sums and Order Statistics of Stationary Sequences*. Toruń, Poland: Uniwersytet Mikołaja Kopernika.

Jakubowski, A. (1993). Minimal conditions in p-stable limit theorems. *Stochastic Processes and their Applications 44*, 291–327.

Jakubowski, A. and M. Kobus (1989). α-stable limit theorems for sums of dependent random vectors. *J. Multivariate Anal. 29*(2), 219–251.

Jakubowski, T. (2002). The estimates for the Green function in Lipschitz domains for the symmetric stable processes. *Probability and Mathematical Statistics 22*, 419 – 441.

Jama, S. (2009, March). An alternative model for multivariate stable distributions. M sc., Univ. of Cape Town, South Africa.

James, L. F. (2010). Lamperti-type laws. *Ann. Appl. Probab. 20*(4), 1303–1340.

James, R. (1947). Inner products in normed linear spaces. *Bulletin of AMS*, 559–566.

Jamison, B. and S. Orey (1970). Subgroups of sequences and paths. *Proceedings of the American Mathematical Society 24*, 739–744.

Jammalamadaka, S. R. and A. SenGupta (2001). *Topics in circular statistics*. Singapore: World Scientific.

Janacek, G. (1982). Determining the degree of differencing for time series via the long spectrum. *Journal of Time Series Analysis 3*, 177–183.

Janicki, A. and A. Weron (1994). *Simulation and Chaotic Behavior of α-Stable Stochastic Processes*. New York: Marcel Dekker.

Janssen, A. (1982a). Some zero-one laws for semistable and selfdecomposable measures on locally convex spaces. In *Probability Measures on Groups. Proc. Oberwolfach*, pp. 236–246. Springer-Verlag. Lecture Notes in Math. 928.

Janssen, A. (1982b). Zero-one laws for infinitely divisible measures on groups. *Zeitschrift für Wahrscheinlichkeitstheorie und verwandte Gebiete 60*, 119–138.

Janssen, A. (1984). A survey about zero-one laws for probability measures on linear spaces and locally compact groups. In *Lecture Notes in Math.*, pp. 551–553. Springer-Verlag. 1064.

Janßen, A. and P. Wan (2019, Apr). k-means clustering of extremes. *arXiv e-prints*, arXiv:1904.02970.

Janzen, K., A. Engel, and M. Mézard (2010, Mar). The Lévy spin glass transition. *EPL (Europhysics Letters) 89*(6), 67002.

Janzen, K., A. Engel, and M. Mézard (2010, Aug). Thermodynamics of the Lévy spin glass. *Phys. Rev. E 82*, 021127.

Jaoua, N., E. Duflos, P. Vanheeghe, L. Clavier, and F. Septier (2014). Joint estimation of state and noise parameters in a linear dynamic system with impulsive measurement noise: application to OFDM systems. *Digital Signal Processing 35*, 21 – 36.

Jasiulis, B. H. and J. K. Misiewicz (2008). On the connections between weakly stable and pseudo-isotropic distributions. *Statist. Probab. Lett. 78*(16), 2751–2755.

Jaworski, P. and M. Pitera (2020). A note on conditional variance and characterization of probability distributions. *Statistics & Probability Letters 163*, 108800.

Jayaram, R. and D. P. Woodruff (2023, jun). Towards optimal moment estimation in streaming and distributed models. *ACM Trans. Algorithms 19*(3).

Jeanblanc, M., J. Pitman, and M. Yor (2002). Self-similar processes with independent increments associated with lévy and bessel processes. *Stochastic Processes and their Applications 100*(1), 223 – 231.

Jedidi, W. (2003). Stable processes: mixing and distributional properties. Preprint online at http://www.stochastik.uni-freiburg.de/DYNSTOCH/FRresearch.html.

Jelenković, P. and A. Lazar (1996). Multiplexing on/off sources with subexponential on–periods. Technical Report CTR 457-96-23, Columbia University.

Jelenković, P. and A. Lazar (1997). Asymptotic results for multiplexing subexponential on–off sources. Technical report, Columbia University.

Jelenković, P. and A. Lazar (1998). Subexponential asymptotics of a markov–modulated random walk with queueing applications. *Journal of Applied Probability 35*, 1–23.

Jensen, D. R. (2018). Linear inference under alpha-stable errors. *Biometrics and Biostatistics International Journal 7*(3), 205–210.

Jeske, D. R. and A. Chakravartty (2006). Effectiveness of bootstrap bias correction in the context of clock offset estimators. *Technometrics 48*(4), 530–538.

Jha, R., P. K. Kaw, D. R. Kulkarni, and J. C. Parikh (2003). Evidence of Lévy stable process in tokamak edge turbulence. *Physics of Plasmas 10*(3), 699–704.

Jiao, C. and C. Li (2023). Monte carlo method for the Cauchy problem of fractional diffusion equation concerning fractional Laplacian. *arxiv*.

Jin, H. J. (2005). Heavy tailed behavior of commodity price distribution and optimal hedging demand. Dept. of Ag-Business and Applied Economics, North Dakota State University. To appear in J. Risk and Insurance.

Jing, P. and J. Wang (2006). Testing the equality of multivariate distributions using the bootstrap and integrated empirical processes. *Communications in Statistics - Theory and Methods 35*(4), 661–670.

Joag-Dev, K., M. Perlman, and L. Pitt (1983). Association of normal random variables and Slepian's inequality. *The Annals of Probability 11*, 451–455.

Johnson, J. T., J. V. Toporkov, P. A. Hwang, and J. D. Ouellette (2023). Efficient calculation of the kirchhoff integral for predicting the bistatic normalized radar cross section of ocean-like surfaces. *IEEE Transactions on Geoscience and Remote Sensing 61*, 1–14.

Johnson, W. B., J. Lindenstrauss, and G. Schechtman (1984). Extensions of Lipschitz maps into Banach spaces. In *Israel seminar on geometrical aspects of functional analysis (1983/84)*, pp. I, 15. Tel Aviv: Tel Aviv Univ.

Johnson, W. B. and G. Schechtman (1982). Embedding l_p^m into l_1^n. *Acta Math. 149*(1-2), 71–85.

Johnson, W. B. and G. Schechtman (1991). On the distance of subspaces of l_p^n to l_p^k. *Trans. Amer. Math. Soc. 324*(1), 319–329.

Jona-Lasinio, G. (1977). Probabilistic approach to critical phenomena. In M. Levy and P. Mitter (Eds.), *New Developments in Quantum Field Theory and Statistical Mechanics, Gargese 1976*, New York, pp. 419–466. Plenum.

Jones, B., T. Sulkin, and H. Larsen (2003). Policy punctuations in american political institutions. *American Political Science Review 97*, 151–169.

Jones, G. L. (2004). On the Markov chain central limit theorem. *Probability Surveys 1*, 299–320.

Jones, M. C. and R. Sibson (1987). What is projection pursuit? *Journal of the Royal Statistical Society. Series A. General 150*(1), 1–36. With discussion.

Jørgensen, B. (1997). *The theory of dispersion models*, Volume 76 of *Monographs on Statistics and Applied Probability*. London: Chapman & Hall.

Juba, D., D. J. Audus, M. Mascagni, J. F. Douglas, and W. Keyrouz (2017). Zeno: Software for calculating hydrodynamic, electrical, and shape properties of polymer and particle suspensions. *Journal of Research of National Institute of Standards and Technology 122*(20).

Juba, D., W. Keyrouz, M. Mascagni, and M. Brady (2016). Acceleration and parallelization of ZENO/Walk-on-Spheres. *Procedia Computer Science 80*, 269 – 278. International Conference on Computational Science 2016, ICCS 2016, 6-8 June 2016, San Diego, California, USA.

Julián-Moreno, G., J. E. López de Vergara, I. González, L. de Pedro, J. Royuela-del Val, and F. Simmross-Wattenberg (2017, Sep). Fast parallel α -stable distribution function evaluation and parameter estimation using OpenCL in GPGPUs. *Statistics and Computing 27*(5), 1365–1382.

Jurek, Z. and J. D. Mason (1993). *Operator-Limit Distribuitons in Probability Theory*. New York: Wiley.

Jurek, Z. J. (2007). Random integral representations for free-infinitely divisible and tempered stable distributions. *Statist. Probab. Lett. 77*(4), 417–425.

Jurek, Z. J. and J. D. Mason (1995). Operator-limit distributions in probability theory. *SIAM Review 37*(1), 131–132.

Jurlewicz, A., P. Kern, M. Meerschaert, and H.-P. Scheffler (2012). Fractional governing equations for coupled random walks. *Computers & Mathematics with Applications 64*(10), 3021–3036. Advances in FDE, III.

Jurlewicz, A., A. Weron, and K. Weron (1996). Asymptotic behaviour of stochastic systems with conditionally exponential decay property. *Appl. Math 23*, 379–394.

Kabašinskas, A., L. Sakalauskas, and I. Vaičiulytė (2021). An analytical EM algorithm for sub-Gaussian vectors. *Mathematics 9*(9).

Kabluchko, Z. (2009). Spectral representations of sum- and max-stable processes. *Extremes 12*(4), 401–424.

Kagan, Y. Y. and F. Schoenberg (2001). Estimation of the upper cutoff parameter for the tapered Pareto distribution. *J. Appl. Probab. 38A*, 168–185. David Vere-Jones's Festschrift.

Kakinaka, S. and K. Umeno (2020, 02). Characterizing cryptocurrency market with Lévy's stable distributions. *Journal of the Physical Society of Japan 89*, 024802.

Kakutani, S. (1939). Some characterizations of Euclidean space. *Japan J. Math 16*, 93–97.

Kalinauskaite, N. (1970a). On some expansions for the multidimensional stable densities. *Lithuanian Math. Journal 10*, 726–731.

Kalinauskaite, N. (1970b). On some expansions for the multidimensional stable densities with parameter $\alpha > 1$. *Lithuanian Math. Journal 10*, 490–495.

Kalinauskaitè, N. (1971). The exponential decrease of certain multidimensional stable densities. *Litov. Matem. Sbornik 11*(3), 557–561. In Russian.

Kalkandjiev, T. K., V. P. Petrov, and J. B. Nickolov (1989, jan). Deconvolution versus Derivative Spectroscopy. *Applied Spectroscopy 43*(1), 44–48. http://journals.sagepub.com/doi/10.1366/0003702894201888.

Kallenberg, O. (1974). Series of random processes without discontinuities of the second kind. *The Annals of Probability 2*, 729–737.

Kallenberg, O. (1988). Spreading and predictable sampling in exchangeable sequences and processes. *The Annals of Probability 16*, 508–534.

Kallenberg, O. (1992). Some time change representations of stable integrals, via predictable transformations of local martingales. *Stoch. Proc. and their Appl. 40*, 199–223.

Kallenberg, O. and J. Szulga (1989). Multiple integration with respect to Poisson and lévy processes. *Probability Theory and Related Fields 83*, 101–134.

Kallenberg, W. C. M., J. Oosterhoff, and B. F. Schriever (1985). The number of classes in chi-squared goodness-of-fit tests. *Journal of the American Statistical Association 80*(392), pp. 959–968.

Kallianpur, G. (1970). Zero-one laws for Gaussian processes. *Transactions of the American Mathematical Society 149*, 199–211.

Kallianpur, G. (1980). *Stochastic Filtering Theory*. New York: Springer-Verlag.

Kallsen, J. and P. Tankov (2006). Characterization of dependence of multidimensional Lévy processes using Lévy copulas. *J. Multivariate Anal. 97*(7), 1551–1572.

Kalluri, S. and G. R. Arce (1998). Adaptive weighted myriad filter algorithms for robust signal processing in α-stable noise environments. *IEEE Trans. Signal Processing 46*(2), 322–334.

Kang, E.-H., M. L. Mansfield, and J. F. Douglas (2004, Mar). Numerical path integration technique for the calculation of transport properties of proteins. *Phys. Rev. E 69*, 031918.

Kanter, M. (1972a). Linear sample spaces and stable processes. *J. Funct. Analysis 9*, 441–459.

Kanter, M. (1972b). On the spectral representation for symmetric stable random variables. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete 23*, 1–6.

Kanter, M. (1972c). A representation theorem for L^p spaces. *Proc. Amer. Math. Soc. 31*, 472–474.

Kanter, M. (1973a). The L^p norm of sums of translates of a function. *Transactions of the American Mathematical Society 179*, 35–47.

Kanter, M. (1973b). Stable laws and the imbedding of L^p spaces. *Amer. Math. Monthly 80*, 403–407.

Kanter, M. (1975). Stable densities under change of scale and total variation inequalities. *Ann. Probability 3*(4), 697–707.

Kanter, M. (1976a). On the unimodality of stable densities. *Ann. Prob. 4*, 1006–1008.

Kanter, M. (1976b). Probability inequalities for convex sets. *Journal of Multivariate Analysis 6*, 222–236.

Kanter, M. (1977a). On the boundedness of stable processes. In *Transactions of the Seventh Prague Conference on Information Theory, Statistical Decision Functions, Random Processes and of the Eighth European Meeting of Statisticians (Tech. Univ. Prague, Prague, 1974), Vol. A*, pp. 317–323. Dordrecht: Reidel.

Kanter, M. (1977b). Unimodality and dominance for symmetric random vectors. *Trans. Amer. Math. Soc. 229*, 65–85.

Kanter, M. and W. L. Steiger (1974). Regression and autoregression with infinite variance. *Advances in Appl. Probability 6*, 768–783.

Kaplan, P. D. (2010). Crashes, fat tails and efficient frontiers. Technical report, Morningstar, Chicago. Info online at `corporate.morningstar.com/ib/asp/subject.aspx?xmlfile=6616.xml`.

Kaplan, P. D. (2012). *Frontiers of modern asset allocation*. Hoboken, N.J.: John Wiley & Sons.

Kapoor, B., A. Banerjee, G. A. Tsihrintzis, and N. Nandhakumar (1999). UWB radar detection of targets in foliage using alpha-stable clutter models. *IEEE Transactions on Aerospace and Electronic Systems 35*(3), 819–834.

Kapperud, O. (2020). Recombination and sterility in inversion homo- and heterokaryotypes under a general counting model of chiasma interference. *bioRxiv*.

Karakuş, O., E. Kuruoglu, and M. Altınkaya (2018). Beyond trans-dimensional RJMCMC with a case study in impulsive data modeling. *Signal Processing 153*, 396–410.

Karakuş, O., E. Kuruoğlu, and M. Altinkaya (2020, 06). Modelling impulsive noise in indoor powerline communication systems. *Signal, Image and Video Processing*.

Karakus, O., E. Kuruoglu, and M. Altınkaya (2018). Beyond trans-dimensional RJMCMC with a case study in impulsive data modeling. *Signal Processing 153*, 396–410.

Karine, A. (2014, 09). *Classification et segmentation d'images texturées : application à la caractérisation des fonds marins*. Ph. D. thesis, Université Mohammed V, Rabat.

Karlin, S. and Y. Rinott (1982). Applications of ANOVA type decompositions for comparisons of conditional variance statistics including Jackknife estimates. *Annals of Stat. 10*, 485–501.

Karling, M. J., S. R. C. Lopes, and R. M. de Souza (2020, 12). A Bayesian approach for estimating the parameters of an α-stable distribution. Preprint.

Karnin, Z., K. Lang, and E. Liberty (2016). Optimal quantile approximation in streams. https://arxiv.org/abs/1603.05346.

Karr, A. (1986). *Point Processes and Their Statistical Inference*. New York and Basel: Marcel Dekker.

Kasahara, Y. and M. Maejima (1986). Functional limit theorems for weighted sums of i.i.d. random variables. *Probab. Th. Rel. Fields 72*, 161–183.

Kasahara, Y. and M. Maejima (1988). Weighted sums of i.i.d. random variables attracted to integrals of stable processes. *Prob. Th. Rel. Fields 78*, 75–96.

Kasahara, Y., M. Maejima, and W. Vervaat (1988). Log-fractional stable processes. *Stoch. Proc. Appl. 30*, 329–339.

Kashyap, R. and K. Eom (1988). Estimation in long-memory time series models. *J. of Time Series Analysis 9*, 35–41.

Kaspi, H. and M. Rubinovitch (1975). The stochastic behavior of a buffer with non–identical input lines. *Stochastic Processes and Their Applications 3*, 73–88.

Kateregga, M., S. Mataramvura, and D. Taylor (2017). Parameter estimation for stable distributions with application to commodity futures log-returns. *Cogent Economics & Finance 5*(1), 1318813.

Katoh, D. and S. Shioda (2021). Probability laws of consensus in a broadcast-based consensus-forming algorithm. *Stochastic Models 0*(0), 1–25.

kattumannil, S. K., D. C. Mathew, and G. Hareesh (2019, 09). Detecting conditional independence for modeling non-gaussian time series. *Journal of the Korean Statistical Society 49*.

Kawai, R. and H. Masu (2011). On simulation of tempered stable random variates. *Journal of Computational and Applied Mathematics 235*(8), 2873 – 2887.

Kawai, R. and S. Petrovskii (2012). Multi-scale properties of random walk models of animal movement: lessons from statistical inference. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences 468*(2141), 1428–1451.

Kawata, T. (1972). *Fourier Analysis in Probability Theory*. Academic Press.

Kelley, J. (1955). *General Topology*, Volume 27 of *Graduate Texts in Mathematics*. New York: Springer Verlag.

Kelly, J. F. (2008). *Transient ultrasonic fields in power law attenuation media*. Ph. D. thesis, Michigan State University, Electrical Engineering.

Kelly, J. F. and R. J. McGough (2007, April). Transient Green's function solutions to the Szabo wave equation. Preprint, Michigan State University, Dept. Electrical and Computer Engineering.

Kelly, J. F. and M. M. Meerschaert (2019, Feb). Space-time duality and high-order fractional diffusion. *Phys. Rev. E 99*, 022122.

Kelly, J. F., M. M. Meerschaert, and R. J. McGough (2008). Analytical time-domain Green's functions for power law media. *J. Acoust. Soc. America 124*(5).

Kemperman, J. (1977). On the FKG-inequality for measures on a partially ordered space. *Indagationes Mathematicae 39*, 313–331.

Kerger, P. and K. Kobayashi (2020). Parameter estimation for one-sided heavy-tailed distributions. *Statistics & Probability Letters 164*, 108808.

Keshner, M. (1982). 1/f noise. *Proc. IEEE 70*, 212–218.

Kesten, H. (1973). Random difference equations and renewal theory for products of random matrices. *Acta Mathematica 131*, 207–248.

Kesten, H., M. V. Kozlov, and F. Spitzer (1975). A limit law for random walk in a random environment. *Compositio Math. 30*, 145–168.

Kesten, H., P. Ney, and F. Spitzer (1966). The Galton–Watson process with mean one and finite variance. *Theory of Probability and Its Applications 11*, 513–540.

Kesten, H. and F. Spitzer (1979). A limit theorem related to a new class of self-similar processes. *Zeitschrift für Wahrscheinlichkeitstheorie und verwandte Gebiete 50*, 5–25.

Kharrat, T. and G. N. Boshnakov (2015). *StableEstim: An R Package for Estimating the Stable Laws Parameters and Running Monte Carlo Simulations.* R package version 2.

Khinchine, A. (1938). *Predelnye zakony dlya summ nezavisimykh sluchainykh velichin.* Moscow-Leningrad: GONTI.

Khinchine, A. and P. Lévy (1936). Sur les lois stables. *Comptes Rendus Acad. Sci. Paris 202*, 374–376.

Khindanova, I. and Z. Atakhanova (2002a). Stable modeling in energy risk management. *Mathematical Methods of Operations Research 55*(2), 225–245.

Khindanova, I. and Z. Atakhanova (2002b). Stable modeling in energy risk management. *Math. Methods Oper. Res. 55*(2), 225–245. Special issue on mathematical models in market and credit risk.

Khindanova, I., S. Rachev, and E. Schwartz (2001). Stable modeling of value at risk. *Mathematical and Computer Modelling 34*(9-11), 1223–1259.

Khokhlov, Y., V. Korolev, and A. Zeifman (2020). Multivariate scale-mixed stable distributions and related limit theorems. *Mathematics 8*(5), 1 – 29. DOI: 10.3390/math8050749.

Khoshnevisan, D. and T. M. Lewis (1998). A law of the iterated logarithm for stable processes in random scenery. *Stochastic Processes and their Applications 74*(1), 89–121.

Khoshnevisan, D., D. Wu, and Y. Xiao (2006). Sectorial local non-determinism and the geometry of the Brownian sheet. *Electron. J. Probab. 11*, no. 32, 817–843 (electronic).

Kiani, K. M. and P. V. Bidarkota (2004). On business cycle asymmetries in G7 countries. *Oxford Bulletin of Economics and Statistics 66*(3).

Kida, S. (1982, 05). Statistics of active regions in the β-model of turbulence. *Progress of Theoretical Physics 67*(5), 1630–1632.

Kida, S. (1991). Log-stable distribution and intermittency of turbulence. *Journal of the Physical Society of Japan 60*(1), 5–8.

Kidmose, P. (2000a). Adaptive filtering for non-Gaussian processes. In *Proceedings of International Conference on Acoustics, Speech and Signal Processing*, Volume IEEE ICASSP 2000, pp. 424–427.

Kidmose, P. (2000b). Alpha-stable distributions in signal processing of audio signals. In *Proceedings of 41st Conference on Simulation and Modelling*, Volume Scandinavian Simulation Society, SIMS 2000, pp. 87–94.

Kidmose, P. (2001). Independent components analysis using the spectral measure for alpha-stable distributions. In *Proceedings of IEEE-EURASIP 2001 Workshop on Nonlinear Signal and Image Processing*, Volume CD-ROM NSIP-2001. (file cr1126.pdf).

Kidmose, P. (2002). *Blind separation of heavy tail signals*. Ph. D. thesis, Danish Technical University.

Kim, G., J. Cho, and M. Kang (2020). Cauchy noise removal by weighted nuclear norm minimization. *Journal of Scientific Computing 83*(15). https://doi.org/10.1007/s10915-020-01203-2.

Kim, H. M. and B. Kosko (1996). Fuzzy prediction and filtering in impulsive noise. *Fuzzy Sets and Systems 77*(1), 15–34.

Kim, J. R., S. Mittnik, and S. T. Rachev (1996). Econometrics with α- stable innovation processes. preprint.

Kim, L. and A. Nagaev (1974). The non-symmetric problem of large deviations. *Izv. Akad. Nauk UzSSR, Ser. Fiz. Mat. Nauk 6*, 58–59. In Russian.

Kim, L. and A. Nagaev (1975). The non-symmetric problem of large deviations. *Teor. Verojatnost. i Primenen 20*(1), 58–68. In Russian.

Kim, M. and A. Tewfik (1990). Multiscale signal detection in fractional Brownian motion. *SPIE 1348*, 462–470.

Kim, Y., I. Koprulu, and N. B. Shroff (2015, 09). First exit time of a Lévy flight from a bounded region in R^n. *J. Appl. Probab. 52*(3), 649–664.

Kincses, D. (2020, 05). Shape analysis of hbt correlations at star. *Physics of Particles and Nuclei 51*, 267–269.

Kincses, D. (2024). Pion interferometry with Lévy-stable sources in $\sqrt{s_{NN}}$ = 200 GeV Au + Au collisions at STAR. *Universe 10*(3).

King, D. A. and M. S. Young (1994). Why diversification doesn't work. *Real Estate Review 25*(2), 6–12.

King, G. and L. Zeng (2001). Explaining rare events in international relations. *International Organization 55*, 693–715.

Kingman, J. (1964). Recurrence properties of processes with stationary independent increments. *J. Austral. Math. Soc. 4*, 223–228.

Kipnis, C., J. Lebowitz, E. Prescutti, and H. Spohn (1983). Self-diffusion for particles with stochastic collisions in one dimension. *J. Stat. Physics 30*, 107–121.

Kiriliouk, A., H. Rootzén, J. Segers, and J. L. Wadsworth (2018). Peaks over thresholds modeling with multivariate generalized Pareto distributions. *Technometrics 0*(0), 1–13.

Kiriliouk, A. and C. Zhou (2022, 10). Estimating probabilities of multivariate failure sets based on pairwise tail dependence coefficients.

Kirkire, P. D. (1991). A CLT when summands come randomly from r populations. *Bull., Calcutta Stat. Assoc. 161–164*, 137–143.

Kirkire, P. D. (1993). On the uniform rates of convergence in the central limit theorem for functions of the average of iid random variables. *Egypt. Statist. J. 37*, 59–64.

Kirkire, P. D. (1994). A non-uniform rate of convergence in the local limit theorem for independent random variables. *Sankhya, Ser. A 56*(3), 399–415.

Kittichotpanich, S. (2008, April). Particle filters. M.s. thesis, American University, Washington, DC.

Klafter, J. and I. M. Sokolov (2005, aug). Anomalous diffusion spreads its wings. *Physics World 18*(8), 29.

Klebanov, L., T. Kozubowski, and S. Rachev (2006). *Ill-Posed Problems in Probability and Stability of Random Sums*. NY: Nova Science.

Klebanov, L. B., G. M. Manija, and I. A. Melamed (1984). A problem of zolotarev and analogs of infinitely divisible and stable distributions in a scheme for summing a random number of random variables. *Theory of Probability and its Applications 29*, 791–794.

Klebanov, L. B., S. T. Rachev, and M. Safarian (2000). Local prelimit theorems and their applications to finance. *Appl. Math. Lett. 13*(5), 73–78.

Klebanov, L. B., S. T. Rachev, and G. J. Szekely (1999). Pre-limit theorems and their applications. *Acta Appl. Math. 58*(1-3), 159–174. Limit theorems of probability theory (Vilnius, 1999).

Klebanov, L. B. and L. Slámová (2012). Integer valued stable random variables. Department of Probability and Mathematical Statistics, Charles University, Prague, Czech Republic.

Klüppelberg, C. and A. May (2006). Bivariate extreme value distributions based on polynomial dependence functions. *Mathematical Methods in the Applied Sciences 29*(12), 1467–1480.

Klüppelberg, C. and T. Mikosch (1992a). Parameter estimation for ARMA models with infinite variance innovations. Preprint.

Klüppelberg, C. and T. Mikosch (1992b). Some limit theory for the normalized periodogram of p-stable moving average processes. *Stochastic Processes and Their Applications 47*, 323–344.

Klüppelberg, C. and T. Mikosch (1993). Spectral estimates and stable processes. *Stochastic Processes and Their Applications 47*, 323–344.

Klüppelberg, C. and T. Mikosch (1994). Some limit theory for the self-normalised periodogram of stable processes. *Scand. J. Statist. 21*(4), 485–491.

Klüppelberg, C. and T. Mikosch (1995a). Delay in claim settlement and ruin probability approximations. *Scand. Actuar. J. 2*, 154–168.

Klüppelberg, C. and T. Mikosch (1995b). Explosive Poisson shot noise processes with applications to risk reserves. *Bernoulli 1*, 125–148.

Klüppelberg, C. and T. Mikosch (1995c). Modelling delay in claim settlement. *Scand. Actuar. Journal*, 154–168.

Klüppelberg, C. and T. Mikosch (1996a). Gaussian limit fields for the integrated periodogram. *Ann. Appl. Probab. 6*(3), 969–991.

Klüppelberg, C. and T. Mikosch (1996b). The integrated periodogram for stable processes. *Ann. Statist. 24*(5), 1855–1879.

Klüppelberg, C. and T. Mikosch (1996c). Parameter estimation for a misspecified ARMA model with infinite variance innovations. In *Proceedings of the XVI Seminar on Stability Problems for Stochastic Models, Part II (Eger, 1994)*, Volume 78, pp. 60–65.

Klüppelberg, C. and T. Mikosch (1996d). Self-normalized and randomly centered spectral estimates. In *Athens Conference on Applied Probability and Time Series Analysis, Vol. II (1995)*, Volume 115 of *Lecture Notes in Statist.*, pp. 259–271. New York: Springer.

Klüppelberg, C. and T. Mikosch (1997). Large deviations of heavy-tailed random sums with applications in insurance and finance. *J. Appl. Probab. 34*(2), 293–308.

Klüppelberg, C., T. Mikosch, and A. Schärf (2003). Regular variation in the mean and stable limits for Poisson shot noise. *Bernoulli 9*(3), 467–496.

Klüppelberg, C. and M. Krali (2021). Estimating an extreme bayesian network via scalings. *Journal of Multivariate Analysis 181*, 104672.

Kogon, S. M. and D. B. Williams (1998). Characteristic function based estimation of stable parameters. In R. Adler, R. Feldman, and M. Taqqu (Eds.), *A Practical Guide to Heavy Tailed Data*, pp. 311–338. Boston, MA.: Birkhäuser.

Kohlrausch, R. (1847). Ueber das Dellmann'sche elektrometer. *Ann. Physics (Leipzig) 12*, 393.

Kojar, T. (2015). Brownian motion and symmetrization.

Kojo, K. (1991). Canonical representations of $s\alpha s$-processes and their applications to $m(t)$-processes. Master's thesis, Nagoya University, Nagoya, Japan. Dept. of Math.

Kojo, K. and S. Takenaka (1993). On canonical representations of stable m_t-processes. *Probability and Mathematical Statistics*. To appear.

Kokoszka, P. and K. Podgórski (1993). Ergodicity and weak mixing of semistable processes. *Probability and Mathematical Statistics*. To appear.

Kokoszka, P. and M. Taqqu (1991). New classes of self-similar symmetric stable random fields. Preprint.

Kokoszka, P. and M. Taqqu (1992). Asymptotic dependence of stable self-similar processes of Chentsov type. In M. H. R.M. Dudley and J. Kuelbs (Eds.), *Probability in Banach Spaces, 8: Proceedings of the Eighth International Conference*, Boston, pp. 152–165. Birkhäuser.

Kokoszka, P. and M. Taqqu (1993a). Asymptotic dependence of moving average type self-similar stable random fields. To appear in *Nagoya Math. J.*

Kokoszka, P. and M. Taqqu (1993b). Infinite variance stable ARMA processes. To appear in *Journal of Time Series Analysis*.

Kokoszka, P. and M. Taqqu (1993c). New classes of self-similar symmetric stable random fields. *J. Theoretical Prob.*. To appear.

Kokoszka, P. and M. Taqqu (1995). Fractional ARIMA with stable innovations. *Stochastic Processes and Their Applications 60*, 19–47.

Kokoszka, P. and M. Taqqu (1996a). Infinite variance stable moving averages with long memory. *Journal of Econometrics 73*, 79–99.

Kokoszka, P. and M. Taqqu (1996b). Parameter estimation for infinite variance fractional arima. *Annals of Statistics 24*, 1880–1913.

Kokoszka, P. S. (1996). Prediction of infinite variance fractional ARIMA. *Probab. Math. Statist. 16*(1), 65–83.

Koldobsky, A. (1991). Generalized Lévy representation of norms and isometric embeddings into l_p-spaces. Preprint.

Kolmogorov, A. (1940). Wienersche spiralen und einige andere interessante kurven in Hilbertschen raum. *C.R. (Doklady) Acad. Sci. USSR (N.S.) 26*, 115–118.

Kolmogorov, A. (1941). Local structure of turbulence in an incompressible liquid for very large Reynolds numbers. *C.R. Doklady Acad. Sci. URSS (N.S.) 30*, 299–303.

Kolokoltsov, V., V. Korolev, and V. Uchaikin (2001). Fractional stable distributions. In *Proceedings of the Seminar on Stability Problems for Stochastic Models, Part I (Nałęczow, 1999)*, Volume 105, pp. 2569–2576.

Komaty, A., A. O. Boudraa, J. P. Nolan, and D. Dare (2015). On the behavior of EMD and MEMD in the presence of symmetric $\alpha-$stable noise. *IEEE Signal Processing Letters 22*, 818–821.

Kôno, N. (1983a). Approximate upper functions of Gaussian processes. *J. Math. Kyoto Univ. 23*, 195–209.

Kôno, N. (1983b). Iterated log type strong limit theorems for self-similar processes. *Proc. Japan Acad. Ser. A 59*(A), 85–87.

Kôno, N. and M. Maejima (1991). Self-similar stable processes with stationary increments. In S. Cambanis, G. Samorodnitsky, and M. Taqqu (Eds.), *Stable Processes and Related Topics*, Volume 25 of *Progress in Probability*, Boston, pp. 275–295. Birkhäuser.

Koponen, I. (1995, Jul). Analytic approach to the problem of convergence of truncated lévy flights towards the gaussian stochastic process. *Phys. Rev. E 52*, 1197–1199.

Kosko, B. (2006). *Noise*. NY, NY: Viking.

Kosko, B. and S. Mitaim (2001). Robust stochastic resonance: Signal detection and adaptation in impulsive noise. *Physical Review E 64*, 051110, 1–11.

Kotulska, M. (2007). Natural fluctuations of an electropore show fractional lévy stable motion. *Biophysical Journal 92*(7), 2412 – 2421.

Kotz, S., T. J. Kozubowski, and K. Podgórski (2001). *The Laplace Distribution and Generalizations: A Revisit with Applications to Communications, Economics, Engineering, and Finance*. Boston: Birkhäuser.

Kotz, S. and S. Nadarajah (2000). *Extreme Value Distributions: Theory and Applications*. London: Imperial College Press.

Kouaissah, N. (2021). Using multivariate stochastic dominance to enhance portfolio selection and warn of financial crises. *The Quarterly Review of Economics and Finance 80*, 480–493.

Kouaissah, N. and S. Ortobelli Lozza (2020, 04). Multivariate stochastic dominance applied to sector-based portfolio selection. *IMA Journal of Management Mathematics*. dpaa004.

Koutrouvelis, I. A. (1980). Regression type estimation of the parameters of stable laws. *JASA 75*, 918–928.

Koutrouvelis, I. A. (1981). An iterative procedure for the estimation of the parameters of stable laws. *Commun. Statist. Simula 10*, 17–28.

Kovchegov, Y., A. Negrón, C. Pertel, and C. Wang (2022). Extensions of true skewness for unimodal distributions.

Kowalski, C. J. (1973). Non-normal bivariate distributions with normal marginals. *The American Statistician 27*(3), 103–106.

Kozubowski, T. J. (1994). Representation and properties of geometric stable laws. In A. et al. (Ed.), *Approximation, Probability, and Related Fields*, pp. 321–337. New York: Plenum.

Kozubowski, T. J. (1995). Characterization of multivariate geometric stable distributions. Preprint.

Kozubowski, T. J. (1998). Mixture representation of Linnik distribution revisited. *Statist. Probab. Lett. 38*(2), 157–160.

Kozubowski, T. J. (2000). Exponential mixture representation of geometric stable distributions. *Ann. Inst. Statist. Math. 52*(2), 231–238.

Kozubowski, T. J., M. M. Meerschaert, and K. Podgórski (2006). Fractional laplace motion. *Advances in Applied Probability 38*(2), 451–464.

Kozubowski, T. J. and J. P. Nolan (2008). Infinite divisibility of skew Gaussian and Laplace laws. *Statistics and Probability Letters 78*, 654–660.

Kozubowski, T. J., A. K. Panorska, and F. Qeadan (2011). A new multivariate model involving geometric sums and maxima of exponentials. *Journal of Statistical Planning and Inference 141*, 2353–2367.

Kozubowski, T. J., A. K. Panorska, and S. T. Rachev (2003). *Handbook of Heavy Tailed Distributions in Finance*, Volume 1 of *Handbooks in Finance*, Chapter Statistical Issues in Modelling Multivariate Stable Portfolios, pp. 131–167. Amsterdam: Elsevier.

Kozubowski, T. J. and K. Podgórski (2018). A generalized Sibuya distribution. *Ann. Inst. Statist. Math. 70*(4), 855–887.

Kozubowski, T. J., K. Podgórski, and G. Samorodnitsky (1999). Tails of Lévy measure of geometric stable random variables. *Extremes 1*(3), 367–378.

Kozubowski, T. J. and S. T. Rachev (1994). The theory of geometric stable distributions and its use in modeling financial data. *European Journal of Operational Research 74*, 310–324.

Kołodziejczyk, J. and Y. Tarasenko (2021). Particle swarm optimization and Lévy flight integration. *Procedia Computer Science 192*, 4658–4671. Knowledge-Based and Intelligent Information & Engineering Systems: Proceedings of the 25th International Conference KES2021.

Krakowiak, W. (1978). Zero-one laws for stable and semi-stable measures on Banach spaces. *Bull. l'Acad. Polon. Sc., Ser. Math. 27*, 1045–1049.

Krakowiak, W. and J. Szulga (1986a). Random multilinear forms. *The Annals of Probability 14*, 955–973.

Krakowiak, W. and J. Szulga (1986b). Summability and contractivity of random multilinear forms. Preprint 86-61, Case Western Reserve University.

Krakowiak, W. and J. Szulga (1988a). Hypercontraction principle and random multilinear forms. *Prob. Theory Rel. Fields 77*, 325–342.

Krakowiak, W. and J. Szulga (1988b). A multiple stochastic integral with respect to a strictly p-stable measure. *The Annals of Probability 16*, 764–777.

Krakowiak, W. and J. Szulga (1988c). On a p-stable multiple integral. I. *Prob. Theory Rel. Fields 78*, 437–448.

Kratz, M. and S. I. Resnick (1996). The QQ-estimator and heavy tails. *Comm. Statist. Stochastic Models 12*(4), 699–724.

Kratz, M. F. (2). Level crossings and other level functionals of stationary gaussian processes. *Probab. Surveys 3*, 230–288.

Krbcová, Z., J. Kukal, Q. V. Tran, J. Švihlík, and K. Fliegel (2018). Stochastic and analytic modeling of atmospheric turbulence in image processing. In A. G. Tescher (Ed.), *Applications of Digital Image Processing XLI*, Volume 10752, pp. 799 – 807. International Society for Optics and Photonics: SPIE.

Kremer, D. and H.-P. Scheffler (2021). Multivariate tempered stable random fields. *Journal of Mathematical Analysis and Applications 503*(2), 125347.

Krengel, U. (1985). *Ergodic Theorems*. Berlin, New York: De Gruyter.

Kreyzig, E. (1989). *Introductory Functional Analysis with Applications*. Wiley & Sons.

Kriegel, H.-P., P. Kröger, E. Schubert, and A. Zimek (2008). A general framework for increasing the robustness of PCA-based correlation clustering algorithms. *Scientific and Statistical Database Management*, 418–435.

Kring, S., S. T. Rachev, M. Höchstötter, and F. J. Fabozzi (2009). *Risk Assessment: Decisions in Banking and Finance*, Chapter 6: Estimation of α-stable sub-Gaussian distributions for asset returns, pp. 111–152. Heidelberg: Springer/Physika.

Krivine, J. (1965). Plongment des espaces normes dans les l_p pour $p > 2$. *Comptes Rendus Acad. Sci. Paris 261*, 4307–4310.

Kruczek, P., A. Wyłomańska, M. Teuerle, and J. Gajda (2017). The modified Yule-Walker method for α-stable time series models. *Physica A: Statistical Mechanics and its Applications 469*, 588 – 603.

Kruglov, V. M. (1972). On the extensions of the class of stable distributions. *Th. Prob. Appl. 17*(4), 685–694.

Krutto, A. (2016). Parameter estimation in stable law. *Risks 4*(4), 1–15. http://dx.doi.org/10.3390/risks4040043.

Krutto, A. (2018, December). *Empirical cumulant function based parameter estimation in stable laws*. Ph. D. thesis, University of Tartu, Tartu, Estonia.

Krzysko, M. and Łukasz Smaga (2020). Measuring and testing mutual dependence of multivariate functional data. *Statistics in Transition new series 21*(3), 21–27.

Küchler, U., K. Neumann, M. S. rensen, and A. Streller (1994). Stock returns and hyperbolic distributions. Technical report, Humboldt Universität zu Berlin.

Kuelbs, J. (1973). A representation theorem for symmetric stable processes and stable measures on H. *Zeitschrift für Wahrscheinlichkeitstheorie und verwandte Gebiete 26*, 259–271.

Kuelbs, J. and W. Li (1993). Metric entropy and the small ball problem for Gaussian measures. *J. Funct. Analysis 116*, 133–157.

Kumar, M., N. S. Upadhye, and A. K. B. Chand (2021). Distribution of linear fractal interpolation function for random dataset with stable noise. *Fractals 29*(04), 2150086.

Kunitomo, N. and T. Owada (2006). Empirical likelihood estimation of Lévy processes. http://www.e.u-tokyo.ac.jp/ kunitomo/KO06-12-27.pdf.

Kuno, A. and K. Ikegaya (1973). A statistical investigation of acoustic power radiated by a flow of random point sources. *J. Acoustic Soc. Japan 29*, 662–671.

Künsch, H. (1981). Thermodynamics and statistsical analysis of Gaussian random fields. *Zeitschrift für Wahrscheinlichkeitstheorie und verwandte Gebiete 58*, 407–421.

Kurowicka, D. and R. Cooke (2006). *Uncertainty analysis with high dimensional dependence modelling*. Wiley Series in Probability and Statistics. Chichester: John Wiley & Sons Ltd.

Kurowicka, D. and H. Joe (2011). *Dependence Modeling: Vine Copula Handbook*. Hackensack, NJ: World Scientific Publishing Company.

Kuruoglu, E. and J. Wang (2016). Rate-distortion function for α-stable sources. *AEU - International Journal of Electronics and Communications 70*(7), 974–978.

Kuruoglu, E. and J. Zerubia (2000). Modelling SAR images with a generalisation of the rayleigh distribution. Volume 1, pp. 224–228.

Kuruoglu, E. and J. Zerubia (2003). Skewed alpha-stable distributions for modelling textures. *Pattern Recognition Letters 24*(1-3), 339–348.

Kuruoglu, E. and J. Zerubia (2004). Modeling SAR images with a generalization of the Rayleigh distribution. *IEEE Transactions on Image Processing 13*(4), 527– 533.

Kuruoglu, E. E. (1995). Signal estimation in non-Gaussian noise using polynomial filters. Master's thesis, Cambridge University, UK.

Kuruoglu, E. E. (1998). *Signal processing in α-stable noice environments: a least ℓ_p-norm approach*. Ph. D. thesis, Cambridge University. Department of Engineering.

Kuruoglu, E. E. (2000, March). Parameter estimation of skewed alpha-stable distributions. Submitted to IEEE Transactions on Signal Processing.

Kuruoglu, E. E. and W. J. Fitzgerald (1998, June). Identification of nonlinear autoregressive processes with symmetric alpha-stable innovations. Submitted to IEEE Transactions on Signal Processing.

Kuruoglu, E. E., W. J. Fitzgerald, and P. J. W. Rayner (1998). Near optimal detection of signals in impulsive noise modelled with a symmetric alpha-stable distribution. *IEEE Communications Letters 2*(10), 282–284.

Kuruoglu, E. E., P. J. W. Rayner, and W. J. Fitzgerald (1997). Least ℓ_p-norm estimation of autoregressive model coefficients of symmetric alpha-stable processes. *IEEE Signal Processing Letters 4*(7), 201–203.

Kuruoglu, E. E., P. J. W. Rayner, and W. J. Fitzgerald (1998). Least ℓ_p-norm impulsive noise cancellation with polynomial filters. *Signal Processing 69*(1), 1–14.

Kuruoğlu, E. (2001). Density parameter estimation of skewed α-stable distributions. *IEEE Transactions on Signal Processing 49*(10), 2192–2201. cited By 50.

Kuruoğlu, E. (2002). Nonlinear least ℓ_p-norm filters for nonlinear autoregressive α-stable processes. *Digital Signal Processing: A Review Journal 12*(1), 119–142. cited By 9.

Kuruoğlu, E. (2003). Analytical representation for positive α-stable densities. Volume 6, pp. 729–732. cited By 6.

Kuruoğlu, E., W. Fitzgerald, and P. Rayner (1998). Near optimal detection of signals in impulsive noise modeled with a symmetric α-stable distribution. *IEEE Communications Letters 2*(10), 282–284. cited By 61.

Kuruoğlu, E., P. Rayner, and W. Fitzgerald (1997). Least ℓ_p-norm estimation of autoregressive model coefficients of symmetric α-stable processes. *IEEE Signal Processing Letters 4*(7), 201–203. cited By 11.

Kuruoğlu, E., P. Rayner, and W. Fitzgerald (1998). Least ℓ_p-norm impulsive noise cancellation with polynomial filters. *Signal Processing 69*(1), 1–14. cited By 19.

Kuruoğlu, E. and J. Zerubia (2004). Modeling SAR images with a generalization of the Rayleigh distribution. *IEEE Transactions on Image Processing 13*(4), 527–533. cited By 100.

Kuruoğlu, E. E. (2001, Oct). Density parameter estimation of skewed α-stable distributions. *Signal Processing, IEEE Transactions on 49*(10), 2192–2201.

Kurz-Kim, J.-R., S. T. Rachev, G. Samorodnitsky, and S. Stoyanov (2005, November). Asymptotic distribution of unbiased linear estimators in the presence of heavy-tailed stochastic regressors and residuals. Preprint, BundesBank November 2005 Conference.

Kuske, R. and J. B. Keller (2001). Rate of convergence to a stable law. *SIAM Jour. Appl. Math. 61*(4), 1308–1323.

Kutuzov, D., A. Osovsky, and D. Starov (2024). Properties of 5g video conference traffic and short-term forecasting of input data rate. In *2024 International Russian Smart Industry Conference (SmartIndustryCon)*, pp. 286–293.

Kuznetsov, A. (2011). On extrema of stable processes. *Annals of Probability 39*, 1027–1060.

Kwapień, S. (1987). Decoupling inequalities for polynomial chaos. *The Annals of Probability 15*, 1062–1072.

Kwapień, S. and N. Woyczyński (1987). Double stochastic integrals, random quadratic forms and random series in Orlicz spaces. *The Annals of Probability 15*, 1072–1096.

Kwapień, S. and N. Woyczyński (1992). *Random Series and Stochastic Integrals: Single and Multiple*. Boston: Birkhäuser.

Kwaśnicki, M. (2015, July). Ten equivalent definitions of the fractional Laplace operator. *arXiv e-prints*, arXiv:1507.07356.

Kwaśnicki, M. (2017). Ten equivalent definitions of the fractional Laplace operator. *Fractional Calculus and Applied Analysis 20*(1), 7–51.

Kwaśnicki, M. (2020). A new class of bell-shaped functions. *Trans. Amer. Math. Soc. 373*(4), 2255–2280.

Kwaśnicki, M. and T. Simon (2019, October). Characterisation of the class of bell-shaped functions. *arXiv e-prints*, arXiv:1910.07752. To appear in Tran. Amer. Math. Soc.

Kyprianou, A. E. (2018). Stable processes, self-similarity and the unit ball. *ALEA, Lat. Am. J. Probab. Math. Stat. 15*, 617–690.

Kyprianou, A. E., A. Osojnik, and T. Shardlow (2017, 08). Unbiased 'walk-on-spheres' Monte Carlo methods for the fractional Laplacian. *IMA Journal of Numerical Analysis 38*(3), 1550–1578.

Kyriakakis, C., P. Tsakalides, and T. Holman (1999). Surrounded by sound. *IEEE Signal Processing Magazine 16*(11), 55–66.

Laha, R. and V. Rohatgi (1979). *Probability Theory*. New York: Wiley & Sons.

Laha, R. and V. Rohatgi (1982). Operator self-similar stochastic processes in r_d. *Stoch. Proc. Appl. 12*, 73–84.

Lai, T. and W. Stout (1978). The law of the iterated logarithm and upper-lower class tests for partial sums of stationary Gaussian sequences. *Ann. Prob. 6*, 731–750.

Lai, T. and W. Stout (1980). Limit theorems for sums of dependent random variables. *Zeitschrift für Wahrscheinlichkeitstheorie und verwandte Gebiete 51*, 1–14.

Lamantia, F., S. Ortobelli, and S. Rachev (2006). An empirical comparison among var models and time rules with elliptical and stable distributed returns.

Lambert, P. and J. K. Lindsey (1999). Analysing financial returns by using regression models based on non-symmetric stable distributions. *Applied Statistics 48*, 409–424.

Lamberton, D. and B. Lapeyre (1991). *Introduction au Calcul Stochastique appliqué à la Finance*. Paris: SMAI.

Lamperti, J. (1962). Semi-stable stochastic processes. *Transaction of the American Mathematical Society 1962*, 62–78.

Lamperti, J. (1972). Semi-stable Markov processes i. *Zeitschrift für Wahrscheinlichkeitstheorie und verwandte Gebiete 22*, 205–225.

Lamperti, J. (1996). *Probability, A Survey of the Mathematical Theory* (Second ed.). New York: J. Wiley.

Lan, B. L. (2001). Bohm's quantum-force time series: Stable distribution, flat power spectrum, and implication. *Physical Review A 63*, 042105:1–6.

Lan, B. L. (2002). Nature of the stochastic processes defined by Bohm's momentum and quantum force. *Physical Review A 65*, 032117:1–7.

Lan, B. L. and P. Chandran (2011). Distribution of animal population fluctuations. *Physica A: Statistical Mechanics and its Applications 390*(7), 1289–1294.

Lan, B. L. and C. Masoller (2016, 02). Heavy-tailed fluctuations in the spiking output intensity of semiconductor lasers with optical feedback. *PLOS ONE 11*(2), 1–10.

Lan, B. L. and Y. O. Tan (2007). Statistical properties of stock market indices of different economies. *Physica A 375*, 605–611.

Lan, B. L. and M. Toda (2013, April). Fluctuations of healthy and unhealthy heartbeat intervals. *Europhysics Letters 102*(1), 18002–p1 – p6.

Land, R. and N. Xank (1983). Strongly correlated random fields as observed by a random walker. *Zeitschrift für Wahrscheinlichkeitstheorie und verwandte Gebiete 64*, 327–340.

Landau, L. (1944). On the energy loss of fast particles by ionization. *J. Phys. (USSR) 8*, 201.

Landkof, N. S. (1972). *Foundations of modern potential theory.* Springer-Verlag, New York-Heidelberg. Translated from the Russian by A. P. Doohovskoy, Die Grundlehren der mathematischen Wissenschaften, Band 180.

Landkof, N. S. (1973). Several remarks on stable random processes and α-superharmonic functions. *Mat. Zametki 14*, 901–912.

Lange, K. L., R. J. A. Little, and J. M. G. Taylor (1989). Robust statistical modeling using the t distribution. *J. Amer. Statist. Assoc. 84*(408), 881–896.

Lasserre, J. B. (1999). Integration and homogeneous functions. *Proceedings of the American Mathematical Society 127*(3), 813–818.

Lasserre, J. B. and K. E. Avrachenkov (2001). The multi-dimensional version of $\int_a^b x^p dx$. *The American Mathematical Monthly 108*(2), 151–154.

Lau, H. and A. Lau (1997). The confounding effects of distribution mixtures on some basic methods for handling stable-Paretian distributions. *European Journal of Operational Research 100*, 60–71.

Lau, H.-S. and A. H.-L. Lau (1993). The reliability of the stability-under-addition test for the stable-Paretian hypothesis. *J. Statist. Comput. Simul. 48*, 67–80.

Lauria, D., S. Rachev, and A. Trindade (2021, 06). Global and tail dependence: A differential geometry approach.

Lavallée, D. and R. J. Archuleta (2003). Stochastic modeling of slip spatial complexities for the 1979 imperial valley, california, earthquake. *Geophysical Research Letters 30*, doi:10.1029/2002GL015839.

Lavallée, D. and H. Beltrami (2004). Stochastic modeling of climatic variability in dendrochronology. *Geophysical Research Letters 31*.

Lavoie, J. L., T. J. Osler, and R. Tremblay (1976). Fractional derivatives and special functions. *SIAM Review 18*(2), 240–268.

Lawrence, A. and N. Kottegoda (1977). Stochastic modelling of riverflow time series. *J. Royal Statis. Soc. A 140,*(1), 1–47.

Le Breton, A. and M. Musiela (1993). A generalization of the Kalman filter to models with infinite variance. *Stochastic Processes and their Applications 47*(1), 75 – 94.

Le Courtois, O. and C. Walter (2016, 04). Lévy processes and extreme value theory. *5*.

Leadbetter, M., G. Lindgren, and H. Rootzén (1983). *Extremes and Related Properties of Random Sequences and Processes*. New York: Springer Verlag.

Leadbetter, M. R. and H. Rootzen (1988). Extremal Theory for Stochastic Processes. *The Annals of Probability 16*(2), 431 – 478.

Ledoux, M. (2001). *The concentration of measure phenomenon*, Volume 89 of *Mathematical Surveys and Monographs*. Providence, RI: American Mathematical Society.

Ledoux, M. and V. I. Paulauskas (1996). A rate of convergence in the Poissonian representation of stable distributions. *Liet. Mat. Rink. 36*(4), 486–500.

Ledoux, M. and M. Talagrand (1991). *Probability in Banach Spaces: Isoperimetry and Processes*. Springer Verlag.

Lee, C. H., H. Zhou, J. Ning, D. D. Liu, and Y. Shen (2020). CoxPhLb: An R Package for Analyzing Length Biased Data under Cox Model. *The R Journal 12*(1), 118–130.

Lee, M.-L., S. Rachev, and G. Samorodnitsky (1990). Association of stable random variables. *The Annals of Probability 18*, 1759–1764.

Lee, M.-L., S. Rachev, and G. Samorodnitsky (1993). Dependence of stable random variables. In M. Shaked and Y. Tong (Eds.), *Stochastic Inequalities*, pp. 219–234. IMS.

Lee, R., J. P. Nolan, and A. White (2005). Discrete stable distributions. Technical Report.

Lee, R.-Y. (1999, June). Radar signal/image processing enhancements using alpha-stable techniques. Technical Report DTIC No. ADA327774, Naval Air Warfare Center, Patuxent River, MD.

Lee, W. H. (2009, July). *Continuous and discrete properties of stochastic processes*. PhD thesis, University of Nottingham, UK.

Lefévre, C. and S. Loisel (2009). Finite-time ruin probabilities for discrete, possibly dependent, claim severities. *Methodology and Computing in Applied Probability 11*(3), 425–441.

Legg, M. W. (2010, February). *Non-Gaussian and non-homogeneous Poisson models of snapping shrimp noise*. Phd thesis, Curtin University of Technology, Bentley, Australia.

Legg, M. W., A. J. Duncan, A. Zaknich, and M. V. Greening (2007). Analysis of impulsive biological noise due to snapping shrimp as a point process in time. *Proceedings of OCEANS 2007, Aberdeen, Scotland*. IEEE.

Leglaive, S., U. Simsekli, A. Liutkus, R. Badeau, and G. Richard (2017, March). Alpha-stable multichannel audio source separation. In *2017 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)*, pp. 576–580.

Lei, W. H., C. Li, F. Chen, S. J. Zhong, Z. G. Xu, and P. F. Chen (2020, 03). Do the solar flares originating from an individual active region follow a random process or a memory-dependent correlation? *Monthly Notices of the Royal Astronomical Society*, 1–8.

Leipus, R., V. I. Paulauskas, and D. Surgailis (2005). Renewal regime switching and stable limit laws. *J. Econometrics 129*(1-2), 299–327.

Leitch, R. A. and A. S. Paulson (1975). Estimation of stable law parameters: Stock price behaviour application. *J. Amer. Stat. Assoc. 70*, 690–697.

Leland, W., M. Taqqu, W. Willinger, and D. Wilson (1993a). Ethernet traffic in self-similar stochastic modelling of packet traffic data. Preprint.

Leland, W., M. Taqqu, W. Willinger, and D. Wilson (1993b). On the self-similar nature of Ethernet traffic. *ACM/SIGCOMM Computer Communications Review*. Proceedings of the ACM/SIGCOMM93. To appear.

Leland, W., M. Taqqu, W. Willinger, and D. Wilson (1994). On the self-similar nature of Ethernet traffic (extended version). *IEEE/ACM Transactions on Networking 2*, 1–15.

Lellouche, S. and M. Souris (2020). Distribution of distances between elements in a compact set. *Stats 3*(1), 1–15.

Lemeshko, B., P. Blinov, and S. Lemeshko (2016). Goodness-of-fit tests for uniformity of probability distribution law. *Optoelectron.Instrument.Proc. 52*, 128–140. doi:10.3103/S8756699016020047.

Lemke, T. (2014). *Poisson Series Approaches to Bayesian Monte Carlo Inference for Skewed α-Stable Distributions and Stochastic Processes*. Ph. D. thesis, Kaiserslautern University of Technology.

Lemke, T. and S. J. Godsill (2011, May). Enhanced Poisson sum representation for alpha-stable processes. In *Acoustics, Speech and Signal Processing (ICASSP), 2011 IEEE International Conference on*, pp. 4100–4103.

Lemke, T. and S. J. Godsill (2012, March). Linear Gaussian computations for near-exact Bayesian Monte Carlo inference in skewed alpha-stable time series models. In *Acoustics, Speech and Signal Processing (ICASSP), 2012 IEEE International Conference on*, pp. 3737–3740.

Lemke, T. and S. J. Godsill (2014). A Poisson series approach to Bayesian Monte Carlo inference for skewed alpha-stable distributions. In *Acoustics, Speech and Signal Processing (ICASSP), 2014 IEEE International Conference on*, pp. 8023–8027. IEEE.

Lemke, T. and S. J. Godsill (2015). Inference for models with asymmetric α-stable noise processes. In Koopman S. J. and Shephard N. (Ed.), *Unobserved Components and Time Series Econometrics*, Chapter 9. Oxford: Oxford University Press.

Lemke, T., M. Riabiz, and S. J. Godsill (2015). Fully Bayesian inference for α-stable distributions using a Poisson series representation. *Digital Signal Processing 47*, 96 – 115. Special Issue in Honour of William J. (Bill) Fitzgerald.

Leo, W. R. (1994). *Techniques for Nuclear and Particle Physics Experiments*. New York: Springer.

Leonenko, N. (1990). Sojourns of multidimensional Gaussian random fields with dependent components. *Computers Math. Appl. 19*(1), 101–108.

Leonenko, N. and E. Orsingher (1992). Limit theorems for solutions of Burghers equation with Gaussian and non-Gaussian initial conditions. preprint, Dipartimento di Statistica, Probabilita' e Statistiche Applicate.

Lepage, R. (1980). Multidimensional infinitely divisible variables and processes. part i: stable case. Technical report 292, Department of Statistics, Stanford University.

LePage, R. (1980). Multidimensional infinitely divisible variables and processes. Part II. *Springer Lecture Notes in Math. 860*, 279–284.

LePage, R. (1987). Predicting transforms of stable noise and other Gaussian mixtures. Tech Report 193, Center for Stochastic Processes, UNC, Chapel Hill. Revised and published as "Conditional moments for coordinates of stable vectors" in "Springer Lecture Notes in Math." Vol 1391 (1990), 148-152.

LePage, R. (1990a). Conditional moments for coordinates of stable vectors. *Springer Lecture Notes in Math. 1391*, 148–152.

LePage, R. (1990b). Multidimensional infinitely divisible variables and processes. Part I: Stable Case. *Springer Lecture Notes in Math. 1391*, 153–163.

LePage, R. and K. Podgórski (1996). Resampling permutations in regression without second moments. *J. Multivariate Anal. 57*(1), 119–141.

LePage, R., K. Podgorski, M. Ryznar, and A. White (1998). Bootstrapping signs and permutations for regression with heavy-tailed errors: a robust resampling. See Adler et al. (1998), pp. 339–359.

LePage, R., M. Woodroofe, and J. Zinn (1981). Convergence to a stable distribution via order statistics. *Ann. Prob. 9*, 624–632.

Lettenmaier, D. and S. Burgess (1977). Operational assessment of hydro-logical models of long-term persistence. *Water Resour. Res. 13*, 113–124.

Levene, M. (2021). A hypothesis test for the goodness-of-fit of the marginal distribution of a time series with application to stablecoin data. *Engineering Proceedings 5*(1).

Levi, E. and R. V. Craiu (2021). Finding our Way in the Dark: Approximate MCMC for Approximate Bayesian Methods. *Bayesian Analysis*, 1 – 29.

Levy, J. and M. Taqqu (1987). On renewal processes having stable inter-renewal intervals and stable rewards. *Les Annales des Sciences Mathematiques du Quebec 11*, 95–110.

Levy, J. and M. Taqqu (1991). A characterization of the asymptotic behavior of stationary stable processes. In S. Cambanis, G. Samorodnitsky, and M. Taqqu (Eds.), *Stable Processes and Related Topics*, Volume 25 of *Progress in Probability*, Boston, pp. 181–198. Birkhäuser.

Levy., J. and M. Taqqu (2005, November). The asymptotic codifference and covariation of log-fractional stable noise. Preprint, BundesBank November 2005 Conference.

Lévy, P. (1924). Théorie des erreurs la loi de Gauss et les lois exceptionelles. *Bulletin Soc. Math. France 52*, 49–85.

Lévy, P. (1925). *Calcul des Probabilités*. Paris: Gauthier-Villars.

Lévy, P. (1954). *Théorie de l'addition des variables aléatoires*. Paris: Gauthier-Villars. Originally appeared in 1937.

Lévy, P. (1965). *Processus stochastiques et mouvement brownien*. Paris: Gauthier-Villars. Originally appeared in 1948.

Lévy, P. (1966). Fonctions Browniennes dans l'espace Euclidien et dans l'espace de Hilbert. In F. David (Ed.), *Research Papers in Statistics*, pp. 189–223. Wiley.

Lévy, P. (1970). *Quelques aspects de la pensée d'un mathématicien*. 9 rue de Médicis, Paris 6^e: Albert Blanchard.

Lewandowski, M. (2003). On the exit time of α-stable process. *Prob. and Math. Statistics 23*(1), 209–215.

Lewandowski, M., M. Ryznar, and T. Zak (1992). Stable measure of a small ball. *Proc. Amer. Math. Soc. 115*(2), 489–494.

Lewandowski, M., M. Ryznar, and T. Zak (1995). Anderson inequality is strict for Gaussian and stable measures. *Proc. Amer. Math. Soc. 123*(12), 3875–3880.

Lewandowski, M. and T. Żak (1987). On the density of the distribution of p-stable seminorms, $0 < p < 1$. *Proc. Amer. Math. Soc. 100*(2), 345–351.

Lewin, M. (2022). Coulomb and Riesz gases: The known and the unknown. *Journal of Mathematical Physics 63*(6), 061101.

Lewis, P. (1964). A branching Poisson process model for the analysis of computer failure pattern. *Journal Royal Stat. Soc., Ser. B 26*, 398–456.

Li, C. and G. Yu (2010, Jan). A new statistical model for rolling element bearing fault signals based on alpha-stable distribution. In *Computer Modeling and Simulation, 2010. ICCMS '10. Second International Conference on*, Volume 4, pp. 386–390.

Li, H., S. Zhang, C. Zhang, P. Li, and R. Cropp (2017). A novel unsupervised Lévy flight particle swarm optimization (ULPSO) method for multispectral remote-sensing image classification. *International Journal of Remote Sensing 38*(23), 6970–6992.

Li, L. and J. Mustard (2000). Compositional gradients across mare-highland contacts: importance and geological implication of lateral transport. *J of Geophysical Research 105*(E8), 20431 – 20450.

Li, L. and J. Mustard (2005). Lateral mixing on the moon: remote sensing observations and modeling. *Geophys. Res. 110*, EE11002.

Li, P., W. Chen, H. Ge, and M. K. Ng (2020). $\ell_1 - \alpha\ell_2$ minimization methods for signal and image reconstruction with impulsive noise removal. *Inverse Problems 36*(5).

Li, P., T. J. Hastie, and K. W. Church (2007). Nonlinear estimators and tail bounds for dimension reduction in l_1 using Cauchy random projections. *Journal of Machine Learning Research 8*, 2497–2532.

Li, P., X. Wang, and Q. Xiao (2017). Several properties of α-harmonic functions in the unit disk. *Monatsh Math 184*, 627–640. https://doi.org/10.1007/s00605-017-1065-7.

Li, R., Z. Zhao, Y. Zhong, C. Qi, and H. Zhang (2019). The stochastic geometry analyses of cellular networks with α-stable self-similarity. *IEEE Transactions on Communications 67*(3), 2487–2503.

Li, S. (2011). Concise formulas for the area and volume of a hyperspherical cap. *Asian Journal of Mathematics and Statistics 4*(1), 66 – 70.

Li, W. and A. McLeod (1986). Fractional time series modelling. *Biometrika 73*, 217–221.

Li, Y. and J. Duan (2020, 05). A data-driven approach for discovering stochastic dynamical systems with non-Gaussian Lévy noise. Online at ResearchGate.

Li, Z. and C. Ma (2013, January). Asymptotic properties of estimators in a stable Cox-Ingersoll-Ross model. Preprint online at arXiv:1301.3243v1.

Liang, Y. and W. Chen (2013). A survey on computing Lévy stable distributions and a new MATLAB toolbox. *Signal Processing 93*, 242–251.

Liebscher, E. and W.-D. Richter (2020). Modelling with star-shaped distributions. *Dependence Modeling 8*(1), 45 – 69.

Liechty, J. C., D. K. J. Lin, and J. P. McDermott (2003). Single-pass low-storage arbitrary quantile estimation for massive data sets. *Statistics and Computing 13*, 91–100.

Likhanov, N., B. Tsybakov, and N. D. Georganas (1995). Analysis of an atm buffer with self-similar ("fractal") input traffic. *Proceedings of the 14th Annual IEEE INFOCOM*, 985–992.

Lin, J.-H., Y.-H. Li, S.-H. Lin, and B.-H. Nguyen (2018, May). Configuration dependent output characteristics with Fabry-Perot and random lasers from dye-doped liquid crystals within glass cells. *Photon. Res. 6*(5), 403–408.

Linde, W. (1984). Extension of slepian lemma to p-stable measures. In *Probability Theory on Vector Spaces III*, New York. Springer Verlag. Lecture Notes in Mathematics, Vol. 1080.

Linde, W. (1986). *Probability in Banach Spaces-Stable and Infinitely Divisible Distributions*. Chichester: Wiley.

Linde, W., V. Mandrekar, and A. Weron (1980). p-stable measures and absolutely summing operators. In A. Weron (Ed.), *Probability Theory on Vector Spaces II. Proceedings*, pp. 167–178. Springer Verlag. Lecture Notes in Mathematics. Vol. 828.

Linde, W. and P. Mathé (1983). Conditional symmetries of stable measures on r^n. *Ann. Inst. H. Poincaré 19*, 57–69.

Linder, F., J. Tran-Gia, S. R. Dahmen, and H. Hinrichsen (2008, apr). Long-range epidemic spreading with immunization. *Journal of Physics A: Mathematical and Theoretical 41*(18), 185005.

Ling, X. (2022). Unifying additive p-value combination tests with regularly varying tails. Poster at JSM 2022.

Ling, X. and Y. Rho (2022). Stable combination tests. *Statistica Sinica 32*, 641–644.

Linhares, R. R. (2020). The ecf-ws estimator for univariate symmetric stable distributions with application in seismic trace signals. *Communications in Statistics - Simulation and Computation 0*(0), 1–13.

Lischke, A., G. Pang, M. Gulian, F. Song, C. Glusa, X. Zheng, Z. Mao, W. Cai, M. M. Meerschaert, M. Ainsworth, and G. E. Karniadakis (2020). What is the fractional laplacian? a comparative review with new results. *Journal of Computational Physics 404*, 109009.

Litvinenko, A., Y. Marzouk, H. G. Matthies, M. Scavino, and A. Spantini (2022). Computing f-divergences and distances of high-dimensional probability density functions. *Numerical Linear Algebra with Applications*, e2467.

Liu, F.-S. and W.-F. Chen (1994). A new universal theory of non-exponential relaxation. *Journal of Physics D: Applied Physics 27*(4), 845–847.

Liu, K., Y. Chen, P. D. Domański, and X. Zhang (2018). A novel method for control performance assessment with fractional order signal processing and its application to semiconductor manufacturing. *Algorithms 11*(7).

Liu, S. (2009). *Lois stables et processus ponctuels: liens et estimation des paramétres*. Ph. D. thesis, Université des Sciences et Technologies de Lille.

Liu, S.-M. and B. W. Brorsen (1995a). GARCH-stable as a model of futures price movements. *Review of Quantitative Finance and Accounting 5*, 155–167.

Liu, S.-M. and B. W. Brorsen (1995b). Maximum likelihood estimation of a GARCH-stable model. *Journal of Applied Econometrics 10*, 273–285.

Liu, T., T. Qiu, F. Jin, S. Wilcox, and S. Luan (2019, July). Phased fractional lower-order cyclic moment processed in compressive signal processing. *IEEE Access 99*.

Liu, T., T. Qiu, and S. Luan (2019). Hyperbolic-tangent-function-based cyclic correlation: Definition and theory. *Signal Processing 164*, 206–216.

Liu, W., Y. Wang, and T. Qiu (2008). Evoked potential latency delay estimation by using covariation correlation approach. In *The 2nd International Conference on Bioinformatics and Biomedical Engineering*, pp. 652 – 655. IEEE.

Liu, X. and D. Preve (2016). Measure of location-based estimators in simple linear regression. *Journal of Statistical Computation and Simulation 86*(9), 1771–1784.

Liu, Y., X. Long, P. R. Martin, S. G. Solomon, and P. Gong (2021, 06). Lévy walk dynamics explain gamma burst patterns in primate cerebral cortex. *Communications Biology 4*, 739.

Liu, Y. and J. Xie (2020). Cauchy combination test: A powerful test with analytic p-value calculation under arbitrary dependency structures. *Journal of the American Statistical Association 115*(529), 393–402. PMID: 33012899.

Liu, Z., P. Nain, D. Towsley, and Z.-L. Zhang (1997). Asymptotic behavior of a multiplexer fed by a long–range dependent process. Technical Report CMPSRI 97-16, University of Massachusetts at Amherst.

Lo, A. (1991). Long-term memory in stock market prices. *Econometrica 59*, 1279–1313.

Loève, M. (1977). *Probability Theory*, Volume 1. New York: Springer-Verlag.

Logan, B., C. Mallows, S. Rice, and L. Shepp (1973a). Limit distributions of self-normallized sums. *Ann. Probability 1*, 788–809.

Logan, B. F., C. L. Mallows, S. O. Rice, and L. A. Shepp (1973b). Limit distributions of self-normalized sums. *Ann. Probability 1*, 788–809.

Lombardi, M. and S. Godsill (2006a). On-line bayesian estimation of ar signals in symmetric alpha-stable noise. *IEEE Trans. on Signal Processing 54*(2), 775 – 779.

Lombardi, M. J. (2007a). Bayesian inference for [alpha]-stable distributions: A random walk mcmc approach. *Computational Statistics and Data Analysis 51*(5), 2688 – 2700.

Lombardi, M. J. (2007b). Bayesian inference for α-stable distributions: A random walk MCMC approach . *Computational Statistics & Data Analysis 51*(5), 2688 – 2700.

Lombardi, M. J. and G. Calzolari (2005, November). Indirect estimation of α-stable stochastic volatility models. Preprint, BundesBank November 2005 Conference.

Lombardi, M. J. and S. J. Godsill (2006b). On-line Bayesian estimation of signals in symmetric α-stable noise. *Signal Processing, IEEE Transactions on 54*(2), 775–779.

Lombardi, M. J. and D. Veredas (2009). Indirect infeeence of elliptical fat tailed distributions. *Computational Statistics and Data Analysis 53*, 2309–2324.

Lopes, M. E. (2016, Sept). Unknown sparsity in compressed sensing: Denoising and inference. *IEEE Transactions on Information Theory 62*(9), 5145–5166.

Loretan, M. and P. Phillips (1994). Testing the covariance stationarity of heavy-tailed time series. *J. Empirical Finance 1*, 211–248.

Lou, J. (1985). Some properties of a special class of self-similar processes. *Zeitschrift für Wahrscheinlichkeitstheorie und verwandte Gebiete 68*, 493–502.

Louhichi, S. and P. Soulier (2002). The central limit theorem for stationary associated sequences. *Acta Math. Hungar. 97*(1-2), 15–36.

Louie, D. and B. S. Rajput (1980). Support and seminorm integrability theorems for r-semistable probability measures on LCTVS. In *Probability theory on vector spaces, II (Proc. Second Internat. Conf., Błażejewko, 1979)*, Volume 828 of *Lecture Notes in Math.*, pp. 179–195. Springer, Berlin.

Louie, D., B. S. Rajput, and A. Tortrat (1980). A zero-one dichotomy theorem for r-semistable laws on infinite-dimensional linear spaces. *Sankhyā Ser. A 42*(1-2), 9–18.

Lovejoy, S. (1982). Area-perimeter relation for rain and cloud areas. *Science 216*, 185–187.

Lovejoy, S. and B. Mandelbrot (1985). Fractal properties of rain, and a fractal model. *Tellus 37*(A), 209–232.

Lovejoy, S. and D. Schertzer (1982). Buoyancy, shear, scaling and fractals. Preprint.

Lovejoy, S. and D. Schertzer (1986a). Scale invariance in climatological temperatures and the local spectral plateau. *Annales Geophysicae 4*(B4), 401–410.

Lovejoy, S. and D. Schertzer (1986b). Scale invariance, symmetries, fractals and stochastic simulations of atmospheric phenomena. *Bull. Am. Meteorological Soc. 67*(1), 21–32.

Lowen, S. and M. Teich (1990). Power-law shot noise. *IEEE Trans. on Info. Theory IT-36*(6), 1302–1318.

Lukacs, E. (1970). *Characteristic functions*. London: Charles Griffin and Co.

Lukkassen, D. (2004, Nov). A short introduction to Sobolev spaces and applications for engineering students.

Lundahl, T., W. Ohley, S. Kay, and R. Siffert (1986). Fractional Brownian motion: A maximum likelihood estimator and its application to image texture. *IEEE Trans Pattern Anal. Machine Intell. MI-5*(3), 152–161.

Luty, B. A., J. A. McCammon, and H. Zhou (1992). Diffusive reaction rates from brownian dynamics simulations: Replacing the outer cutoff surface by an analytical treatment. *The Journal of Chemical Physics 97*(8), 5682–5686.

Ma, X. and C. Nikias (1995). On blind channel identification for impulsive signal environments. In *Proceedings ICASSP 1995*. IEEE.

Machado, J. A. T. and A. M. Lopes (2020). Rare and extreme events: the case of covid-19 pandemic. *Nonlinear Dyn*. https://doi.org/10.1007/s11071-020-05680-w.

MacNeil, I. (1978). Properties of sequences of partial sums of polynomial regression residuals with applications to tests for change of regression at unknown time. *The Annals of Statistics 6*, 422–433.

Maejima, M. (1981). Some sojourn time problems for strongly dependent Gaussian processes. *Z. Warscheinlichkeitstheorie Verw. Geb. 57*, 1–14.

Maejima, M. (1982). Some limit theorems for sojourn times of strongly dependent Gaussian processes. *Z. Warscheinlichkeitstheorie Verw. Geb. 60*, 359–380.

Maejima, M. (1983a). On a class of self-similar processes. *Zeitschrift für Wahrscheinlichkeitstheorie und verwandte Gebiete 62*, 235–245.

Maejima, M. (1983b). A self-similar process with nowhere bounded sample paths. *Zeitschrift für Wahrscheinlichkeitstheorie und verwandte Gebiete 65*, 115–119.

Maejima, M. (1983c). Some limit theorems for sojourn times of strongly dependent Gaussian processes. *Z. Warscheinlichkeitstheorie Verw. Geb. 62*, 235–245.

Maejima, M. (1985). Sojourns of multidimensional Gaussian processes with dependent components. *Yokohama Math. J. 33*, 121–130.

Maejima, M. (1986a). A remark on self-similar processes with stationary increments. *Canadian J. Statist. 14*, 81–82.

Maejima, M. (1986b). Sojourns of multidimensional Gaussian processes. In E. Eberlein and M. Taqqu (Eds.), *Dependence in Probability and Statistics*, Boston, pp. 91–108. Birkhäuser.

Maejima, M. (1986c). Some sojourn time problems for 2-dimensional Gaussian processes. *Journal of Multivariate Analysis 18*, 52–69.

Maejima, M. (1989). Self-similar processes and limit theorems. *Sugaku Expositions 2*, 103–123.

Maejima, M. (2001). *Semistable Distributions*, pp. 169–183. Boston, MA: Birkhäuser Boston.

Maejima, M. and T. Rachev (1987). An ideal metric and the rate of convergence to a self-similar process. *The Annals of Probability 15*(2), 708–727.

Magron, P., R. Badeau, and A. Liutkus (2017, October). Lévy NMF for robust nonnegative source seperation. *2017 Workshop on Applications of Signal Processing to Audio and Acoustics*.

Mahdizadeh, M. and E. Zamanzade (2019). Goodness-of-fit testing for the Cauchy distribution with application to financial modeling. *Journal of King Saud University - Science*.

Mahmood, A. and M. Chitre (2015, May). Modeling colored impulsive noise by markov chains and alpha-stable processes. In *OCEANS 2015 - Genova*, pp. 1–7.

Mahmoudi, P., A. Ghaemi, A. Rigi, and et al. (2021). Recommendations for modifying the standardized precipitation index (SPI) for drought monitoring in arid and semi-arid regions. *Water Resources Management*. https://doi.org/10.1007/s11269-021-02891-7.

Mainardi, F., Y. Luchko, and G. Pagnini (2001). The fundamental solution of the space-time fractional diffusion equation. *Fractional Calculus and Applied Analysis 4*, 153–192.

Mainardi, F., G. Pagnini, and R. Gorenflo (2006). Mellin convolution for subordinated stable processes. *J. Math. Sci. (N. Y.) 132*(5), 637–642.

Mainardi, F., P. Paradisi, and R. Gorenflo (2007, April). Probability distributions generated by fractional diffusion equations. *ArXiv e-prints*.

Mainardi, F. and M. Tomirotti (1997). Seismic pulse propagation with constant Q and stable probability distributions. *Annali di Geofisica 40*, 1311–1328.

Majerek, D., W. Nowak, and W. Zieba (2005). Conditional strong law of large number. *Inter. J. of Pure and Appl. Math. 20*(2), 143–156.

Major, P. (1981a). Limit theorems for non-linear functionals of Gaussian sequences. *Zeitschrift für Wahrscheinlichkeitstheorie und verwandte Gebiete 57*, 129–158.

Major, P. (1981b). *Multiple Wiener-Itô Integrals*, Volume 849 of *Springer Lecture Notes in Mathematics*. New York: Springer Verlag.

Major, P. (1982). On renormalizing Gaussian fields. *Zeitschrift für Wahrscheinlichkeitstheorie und verwandte Gebiete 59*, 515–533.

Major, P. and D. Szasz (1980). On the effect of collisions on the motion of an atom in R^1. *Ann. Probability 8*, 1068–1078.

Majoros, S. and A. Zempléni (2018). Multivariate stable distributions and their applications for modelling cryptocurrency-returns. https://arxiv.org/abs/1810.09521.

Malamud, B. D., G. Morein, and D. L. Turcotte (1998). Forest fires: An example of self-organized critical behavior. *Science 281*(5384), 1840–1842.

Malevergne, Y. and D. Sornette (2001). Multi-dimensional rational bubbles and fat tails. *Quant. Finance 1*(5), 533–541.

Malevergne, Y. and D. Sornette (2006). *Extreme financial risks*. Berlin: Springer-Verlag. From dependence to risk management.

Malevich, T. and B. Abdalimov (1977). Stable limit distributions for U-statistics. *Th. of Prob. and Applic. 22*, 370–377.

Mallat, S. (1989). A theory for multiresolution signal decomposition: the wavelet representation. *IEEE Trans. Pattern Anal. Machine Intell. PAMI-11*(7), 674–693.

Mallick, M. and N. Ravishankaer (2004, November). Bivariate positive stable frailty models. Stat Dept., U. Conn.

Mandelbaum, A. and M. Taqqu (1984). Invariance principle for symmetric statistics. *The Annals of Statistics 12*, 483–496.

Mandelbrot, B. (1960). The Pareto-Lévy law and the distribution of income. *International Economic Review 1*, 79–106.

Mandelbrot, B. (1961). Stable Paretian random functions and the multiplicative variation of income. *Econometria 29*, 517–543.

Mandelbrot, B. (1962). Sur certain prix spéculatifs: faits empiriques et modéle basé sur les processes stables additifs de Paul Lévy. *Comptes Rendus. 254*, 3968–3970.

Mandelbrot, B. (1963a). New methods in statistical economics. *Journal of Political Econ. 71*, 421–440.

Mandelbrot, B. (1963b). The variation of certain speculative prices. *Journal of Business 26*, 394–419.

Mandelbrot, B. (1965a). Self-similar error clusters in communications systems and the concept of conditional systems and the concept of conditional stationarity. *I.E.E.E. Trans of Communications Technology COM-13*, 71–90.

Mandelbrot, B. (1965b). Une classe de processus stochastiques homothetiques a soi; application a loi climatologique de H.E. Hurst. *Comptes Rendus Acad. Sci. Paris 240*, 3274–3277.

Mandelbrot, B. (1967). The variation of some other speculative prices. *Journal of Business 40*, 393–413.

Mandelbrot, B. (1969). Long-run linearity, locally Gaussian processes, H-spectra and infinite variances. *International Econom. Rev. 10*, 82–113.

Mandelbrot, B. (1971). A fast fractional Gaussian noise generator. *Water Resour. Res. 7*, 543–553.

Mandelbrot, B. (1972a). Broken line process derived as an approximation to fractional noise. *Water Resour. Res. 8*, 1354–1356.

Mandelbrot, B. (1972b). Statistical methodology for non-periodic cycles: from the covariance to r/s analysis. *Ann. Econom. Soc. Measurement 1*, 259–290.

Mandelbrot, B. (1974). Intermittent turbulence in self-similar cascades; divergenceof high moments and dimension of the carrier. *J. Fluid Mechanics 62*, 331–358.

Mandelbrot, B. (1975a). Fonctions aléatoires pluri-temporelles: approximation poissonienne du cas brownien et géenéralisations. *Comptes Rendus Acad. Sci. Paris 280A*, 1075–1078.

Mandelbrot, B. (1975b). Limit theorems on the self-normalized range for weakly and strongly dependent processes. *Zeitschrift für Wahrscheinlichkeitstheorie und verwandte Gebiete 31*, 271–285.

Mandelbrot, B. (1984). Fractals in physics: squig clusters, diffusions, fractal measures and the unicity of fractal dimensionality. *J. of Stat. Phys. 34*, 895–930.

Mandelbrot, B. and M. Taqqu (1979). Robust R/S analysis of long-run serial correlation. In *Proceedings of the 42nd Session of the International Statistical Institute*, Manila. Bulletin of the I.S.I. Vol.48, Book 2, pp. 69-104.

Mandelbrot, B. and M. Taylor (1967). On the distribution of stock price differences. *Operations Research 15*, 1057–1062.

Mandelbrot, B. and J. Van Ness (1968). Fractional Brownian motions, fractional noises and applications. *SIAM Review 10*, 422–437.

Mandelbrot, B. and J. Wallis (1968). Noah, joseph and operational hydrology. *Water Resources Research 4*, 909–918.

Mandelbrot, B. and J. Wallis (1969a). Computer experiments with fractional Gaussian noises, parts 1,2,3. *Water Resour. Res. 5*, 228–267.

Mandelbrot, B. and J. Wallis (1969b). Robustness of the rescaled range r/s in the measurement of noncyclic long-run statistical dependence. *Water Resour. Res. 5*, 967–988.

Mandelbrot, B. and J. Wallis (1969c). Some long-run properties of geophysical records. *Water Resour. Res. 5*, 321–340.

Mandelbrot, B. B. (1976). Intermittent turbulence and fractal dimension: kurtosis and the spectral exponent 5/3 + b. In R. Teman (Ed.), *Turbulence and Navier Stokes Equations*, New York, pp. 121–145. Springer. Springer Lecture Notes in Mathematics, Volume 565.

Mandelbrot, B. B. (1982). *The Fractal Geometry of Nature*. San Francisco: W.H. Freeman and Co.

Mandelbrot, B. B. (1989). Multifractal measures, especially for the geophysicist. In C. H. Scholz and B. B. Mandelbrot (Eds.), *Fractals in Geophysics*, Pure and Applied Geophysics, pp. 5–42. Birkhauser Basel.

Manneville, P. (1980). Intermittency, self-similarity and 1/f spectrum in dissipative dynamical systems. *Le Journal de Physique 41*, 1235–1242.

Manos, T. (2020, December). *Non Linear Dynamics in Complex Systems: From Quantum Systems to Brain Neurons and Galaxies*. Ph. D. thesis, CY CERGY PARIS UNIVERSITÉ, Paris.

Mansfield, M. L., J. F. Douglas, and E. J. Garboczi (2001, Nov). Intrinsic viscosity and the electrical polarizability of arbitrarily shaped objects. *Phys. Rev. E 64*, 061401.

Mansfield, P., S. T. Rachev, and G. Samorodnitsky (2001). Long strange segments of a stochastic process. *Ann. Appl. Probab. 11*(3), 878–921.

Mantegna, R. N. (1994). Fast, accurate algorithm for numerical simulation of Lévy stable stochastic processes. *Physical Review E 49*(5), 4677 – 4683.

Mao, Z., S. Chen, and J. Shen (2016). Efficient and accurate spectral method using generalized Jacobi functions for solving Riesz fractional differential equations. *Applied Numerical Matheamtics 106*, 165–181.

Marchal, P. (2005). Measure concentration for stable laws with index close to 2. *Electron. Comm. Probab. 10*, 29–35 (electronic).

Marcus, A. H. (1970). Distribution and covariance function of elevations on a cratered planetary surface. *The Moon 1*, 297–337.

Marcus, D. J. (1983). Non-stable laws with all projections stable. *Zeitschrift für Wahrscheinlichkeitstheorie und verwandte Gebiete 64*, 139–156.

Marcus, M. (1989). Some bounds for the expected number of level crossings of symmetric harmonizable p-stable processes. *Stoch. Proc. Appl. 33*, 217–231.

Marcus, M. and G. Pisier (1981). *Random Fourier Series with Applications to Harmonic Analysis*, Volume 101 of *Annals of Math. Studies*. Princeton Univ. Press.

Marcus, M. and G. Pisier (1984a). Characterization of almost surely continuous p-stable random Fourier series and strongly stationary processes. *Acta Mathematica 152*, 245–301.

Marcus, M. and G. Pisier (1984b). Some results on the continuity of stable processes and the domain of attraction of continuous stable processes. *Ann. Funct. Henri-Poincarè 20*, 177–199.

Marcus, M. and G. Pisier (1985). Stochastic processes with sample paths in exponential Orlicz spaces. .

Marcus, M. and K. Shen (1997). Bounds for the expected number of level crossings of certain harmonizable infinitely divisible processes. Preprint.

Marcus, M. and W. Woyczynski (1979). Stable measures and central limit theorems in spaces of stable type. *Transactions of the American Mathematical Society 251*, 71–102.

Marcus, M. B. (1977). Level crossings of a stochastic process with absolutely continuous sample paths. *The Annals of Probability 5*, 52–71.

Marcus, M. B. (1981). Weak convergence of the empirical characteristic function. *The Annals of Probability 9*, 194–201.

Marcus, M. B. (1987). ξ-radial processes and random fourier series. *Memoirs of the American Mathematical Society 368*.

Marcus, M. B. and J. Rosen (2001). *Lévy Processes*, Chapter Gaussian Processes and Local Times of Symmetric Lévy Processe, pp. 67–88. Birkhäuser.

Marcus, M. B. and K. Shen (1998). Bounds for the expected number of level crossings of certain harmonizable infinitely divisible processes. *Stochastic Process. Appl. 76*(1), 1–32.

Mardia, K. V. and P. E. Jupp (2000). *Directional Statistics*. NY, NY: Wiley.

Marhuenda, Y., D. Morales, and M. Pardo (2005). A comparison of uniformity tests. *Statistics 39*(4), 315 – 327.

Marinelli, C., S. D'Addona, and S. Rachev (2006). A Comparison of Some Univariate Models for Value-at-Risk and Expected Shortfall. *SSRN eLibrary*.

Marohn, F. (1999). Estimating the index of a stable law via the POT-method. *Statistics and Probability Letters 41*, 413–423.

Maroni, G., S. Formentin, and F. Previdi (2019). A robust design strategy for stock trading via feedback control. In *18th European Control Conference (ECC)*, Volume Napoli, Italy, June 25-28, 2019, pp. 477–482.

Marques, M. (1987). *A study on Lebesgue decomposition of measures induced by stable processes*. Ph. D. thesis, University of North Carolina Chapel Hill.

Marshall, A. W. and I. Olkin (1988). Families of multivariate distributions. *J. Amer. Statist. Assoc. 83*(403), 834–841.

Marshall, A. W. and I. Olkin (1990). Multivariate distributions generated from mixtures of convolution and product families. In H. Block, A. Sampson, and T. Savits (Eds.), *Topics in Statistical Dependence*, pp. 371–393. IMS. Institute of Mathematical Statistics Lecture Notes - Monograph Series. Vol. 16.

Martin, R. D., S. Rachev, and F. Siboulet (2006). Phi-alpha optimal porfolios and extreme risk management. Preprint, FinAnlytica Inc.

Maruyama, G. (1970). Infinitely divisible processes. *Theory Prob. Appl. 15*(1), 1–22.

Maruyama, G. (1982). Applications of the multiplication of the Itô-Wiener expansions to limit theorems. *Proc. Japan Acad. 58*(A), 388–390.

Mason, D. (1988). A strong invariance theorem for the tail empirical process. *Ann. Inst. Henri Poincaré 24*, 491–506.

Mason, D. and T. Turova (1994). Weak convergence of the Hill estimator process. In J. Galambos, J. Lechner, and Simiu (Eds.), *Extreme Value: Theory and Applications*. Dordrecht, Holland: Kluwer Academic Publishers.

Massing, T. (2019). What is the best Lévy model for stock indices? A comparative study with a view to time consistency. *Financial Markets and Portfolio Management*. https://doi.org/10.1007/s11408-019-00335-2.

Mathai, A. M. (1993). *A Handbook of Generalized Special Functions for Statistical and Physical Sciences*. New York: Oxford University Press.

Matsui, M. (2005). Fisher information matrix of general stable distributions close to the normal distribution. Technical report, University of Tokyo. `http://arxiv.org/abs/math/0502559`.

Matsui, M. (2021). Asymptotics of maximum likelihood estimation for stable law with continuous parameterization. *Communications in Statistics - Theory and Methods 50*(15), 3695–3712.

Matsui, M. and Z. Pawlas (2013, January). Fractional absolute moments of heavy tailed distributions. *ArXiv e-prints*. 1301.4804.

Matsui, M. and Z. Pawlas (2016, 05). Fractional absolute moments of heavy tailed distributions. *Braz. J. Probab. Stat. 30*(2), 272–298.

Matsui, M. and N. Sueishi (2022, September). Trigonometrically approximated maximum likelihood estimation for stable law. *arXiv e-prints*, arXiv:2209.08980.

Matsui, M. and A. Takemura (2006). Some improvements in numerical evaluation of symmetric stable density and its derivatives. *Communications in Statistics - Theory and Methods 35*(1), 149–172.

Matsui, M. and A. Takemura (2008a). Goodness-of-fit tests for symmetric stable distributions - empirical characteristic function approach. *TEST 17*(3), 546–566.

Matsui, M. and A. Takemura (2008b). Integral representations of one dimensional projections for multivariate stable densities. *J. Multivariate Analysis 100*, 334–344.

Matteson, D. S. and N. A. James (2014). A nonparametric approach for multiple change point analysis of multivariate data. *Journal of the American Statistical Association 109*(505), 334–345.

Mayer-Wolf, E., A. Roitershtein, and O. Zeitouni (2004). Limit theorems for one-dimensional transient random walks in Markov environments. *Ann. Inst. H. Poincaré Probab. Statist. 40*(5), 635–659.

Mayer-Wolf, E. and O. Zeitouni (1993). The probability of small Gaussian ellipsoids and associated conditional moments. *The Annals of Probability 21*, 14–24.

Mazurkiewicz, G. (2005). On $S\alpha S$ density function. *Discussiones Mathematicae. Probability and Statistics 25*(1), 91–101.

Mazurkiewicz, G. (2007). Weakly stable vectors and magic distribution of S. Cambanis, R. Keener and G. Simons. *Applied Mathematical Sciences. Journal for Theory and Applications 1*(17-20), 975–996.

McConnell, T. (1986). Triple integration with respect to stable processes. Preprint.

McConnell, T. and M. Taqqu (1984). Double integration with respect to symmetric stable processes. Technical Report 618, Cornell University.

McConnell, T. and M. Taqqu (1986a). Decoupling inequalities for multilinear forms in symmetric random variables. *Annals of Probability 14*, 943–954.

McConnell, T. and M. Taqqu (1986b). Dyadic approximations of double integrals with respect to symmetric stable processes. *Stoch. Proc. and their Applic. 22*, 323–331.

McConnell, T. and M. Taqqu (1987). Decoupling of Banach-valued multilinear forms in independent symmetric Banach-valued random variables. *Prob. Th. and Rel. Fields 75*, 499–507.

McCullagh, P. (1993). On the distribution of the cauchy maximum-likelihood estimator. *Proceedings: Mathematical and Physical Sciences 440*(1909), pp. 475–479.

McCullagh, P. (1996). Mobius transformation and Cauchy parameter estimation. *The Annals of Statistics 24*(2), pp. 787–808.

McCulloch, J. H. (1985). The precision of var forecasts with symmetric stable disturbances. Preprint, Economics Department, Ohio State University.

McCulloch, J. H. (1986). Simple consistent estimators of stable distribution parameters. *Communications in Statistics. Simulation and Computation 15*, 1109–1136.

McCulloch, J. H. (1994). Estimation of bivariate stable spectral densities. Technical Report, Department of Economics, Ohio State Univertsity.

McCulloch, J. H. (1996a). Financial applications of stable distributions. In G. S. Maddala and C. R. Rao (Eds.), *Handbook of Statistics*, Volume 14. New York: North-Holland.

McCulloch, J. H. (1996b). On the parameterization of the afocal stable distributions. To appear in Bull. of the London Math. Soc.

McCulloch, J. H. (1997). Measuring tail thickness to estimate the stable index alpha: A critique. *J. Bus. Econ. Stat. 15*, 74–81.

McCulloch, J. H. (1998a). Linear regression with stable disturbances. In R. Adler, R. Feldman, and M. Taqqu (Eds.), *A Practical Guide to Heavy Tails: Statistical Techniques for Analyzing Heavy Tailed Distributions*, pp. 359–378. Boston: Birkhäuser.

McCulloch, J. H. (1998b). Maximum likelihood estimation of symmetric stable parameters. Technical Report,Department of Economics, Ohio State University.

McCulloch, J. H. (1998c). Numerical approximation of the symmetric stable distribution and density. In R. Adler, R. Feldman, and M. Taqqu (Eds.), *A Practical Guide to Heavy Tails: Statistical Techniques for Analyzing Heavy Tailed Distributions*, pp. 489–500. Boston: Birkhäuser.

McCulloch, J. H. (2003). The risk-neutral measure under log-stable uncertainty. Technical Report,Department of Economics, Ohio State University.

McCulloch, J. H. (2020, January). State estimation with stable errors and whisker particles. *Preprint*. https://www.asc.ohio-state.edu/mcculloch.2/papers.

McCulloch, J. H. and D. Panton (1998). Tables of the maximally-skewed stable distributions. In R. Adler, R. Feldman, and M. Taqqu (Eds.), *A Practical Guide to Heavy Tails: Statistical Techniques for Analyzing Heavy Tailed Distributions*, pp. 501–508. Boston: Birkhäuser.

McCulloch, J. H. and E. R. Percy (2013). Extended Neyman smooth goodness-of-fit tests, applied to competing heavy-tailed distributions. *Journal of Econometrics 172*, 275–282.

McDermott, J. P., G. J. Babu, J. C. Liechty, and D. K. Lin (2007). Data skeletons: simultaneous estimation of multiple quantiles for massive streaming datasets with applications to density estimation. *Statistics and Computing 17*(4), 311–321. DOI 10.1007/s11222-007-9021-3.

McKean, H. P. (1955). Sample functions of stable processes. *Annals of Mathematics 61*(3), 564–579.

McKean, Jr., H. (1963). Brownian motion with a several dimensional time. *Theory of Probability and its Applications 8*, 357–378.

McKean, Jr., H. (1973a). Geometry of differential space. *Ann. Prob. 1*, 197–206.

McKean, Jr., H. (1973b). Wiener's theory of non-linear noise. *Stochastic Differential Equations, SIAM-AMS Proc. 6*, 191–209.

McLeod, A. and K. Hipel (1983). Perspectives in long-memory modelling. Preprint.

McLeod, A. I. and K. W. Hipel (1978). Preservation of the rescaled adjusted range, parts 1,2,3. *Water Resour. Res. 14*, 491–518.

McNeil, A. J. (1997). Estimating the tails of loss severity distributions using extreme value theory. *ASTIN Bulletin 27*(1), 117–137. DOI: 10.2143/AST.27.1.563210.

McNeil, A. J., R. Frey, and P. Embrechts (2005). *Quantitative risk management*. Princeton Series in Finance. Princeton, NJ: Princeton University Press.

Medford, A. (2021). Modeling best practice life expectancy using Gumbel autoregressive models. *Risks 9*(3).

Meerschaert, M., T. Kozubowski, F. Molz, and S. Lu (2004). Fractional laplace model for hydraulic conductivity. *Geophysical Research Letters 31*, L08501.

Meerschaert, M. M., D. A. Benson, H.-P. Scheffler, and B. Baeumer (2002). Stochastic solution of space-time fractional diffusion equations. *Phys. Rev. E (3) 65*(4), 041103, 4.

Meerschaert, M. M. and H.-P. Scheffler (1997a). Spectral decomposition for generalized domains of semistable attraction. *J. Theoret. Probab. 10*(1), 51–71.

Meerschaert, M. M. and H.-P. Scheffler (1997b). The structure of generalized domains of semistable attraction. *Statist. Probab. Lett. 33*(4), 367–372.

Meerschaert, M. M. and H.-P. Scheffler (1998). A simple robust estimation method for the thickness of heavy tails. *J. Statist. Plann. Inference 71*(1-2), 19–34.

Meerschaert, M. M. and H.-P. Scheffler (1999a). Moment estimator for random vectors with heavy tails. *J. Multivariate Anal. 71*(1), 145–159.

Meerschaert, M. M. and H.-P. Scheffler (1999b). Sample covariance matrix for random vectors with heavy tails. *J. Theoret. Probab. 12*(3), 821–838.

Meerschaert, M. M. and H.-P. Scheffler (1999c). Sample covariance matrix for random vectors with heavy tails. *J. Theoret. Probab. 12*(3), 821–838.

Meerschaert, M. M. and H.-P. Scheffler (2000). Moving averages of random vectors with regularly varying tails. *J. Time Ser. Anal. 21*(3), 297–328.

Meerschaert, M. M. and H.-P. Scheffler (2001a). *Limit distributions for sums of independent random vectors*. New York: John Wiley & Sons Inc.

Meerschaert, M. M. and H.-P. Scheffler (2001b). Sample cross-correlations for moving averages with regularly varying tails. *J. Time Ser. Anal. 22*(4), 481–492.

Meerschaert, M. M. and A. Sikorskii (2012). *Stochastic models for fractional calculus*. De Gruyter, Berlin.

Meerschaert, M. M. and J. A. Veeh (1993). The structure of the exponents and symmetries of an operator stable measure. *J. Theoret. Probab. 6*(4), 713–726.

Meintanis, S. G. (2007). Estimation for strictly positive stable laws. See Ao et al. (2007), pp. 933–935.

Meintanis, S. G. (2016). A review of testing procedures based on the empirical characteristic function. *South African Statistical Journal 50*, 1 – 14.

Meintanis, S. G., J. Ngatchou-Wandji, and E. Taufer (2015). Goodness-of-fit tests for multivariate stable distributions based on the empirical characteristic function. *Journal of Multivariate Analysis 140*, 171–192.

Mejia, J., I. Iturbe-Rodriguez, and D. Dawdy (1978). Streamflow simulation 2: The broken line process as a potential model for hydrological simulation. *Water Resour. Res. 8*, 931–941.

Melchers, R. E. (2021). New insights from probabilistic modelling of corrosion in structural reliability analysis. *Structural Safety 88*, 102034.

Melchers, R. E. (2022). *Engineering for Extremes*, Chapter Extreme Value Analysis for Offshore Pipeline Risk Estimation. Springer Tracts in Civil Engineering. Springer. https://doi.org/10.1007/978-3-030-85018-0_17.

Menabde, M. and M. Sivapalan (2000). Modeling of rainfall time series and extremes, using bounded random cascades and Levy-stable distributions. *Water Resources Research 36*, 3293–3300.

Meraghni, D. and L. Soltane (2019, Apr). Extreme value theory based confidence intervals for the parameters of a symmetric Lévy-stable distribution. *arXiv e-prints*, arXiv:1904.04863.

Mercadier, C. (2006). Numerical bounds for the distributions of the maxima of some one- and two-parameter gaussian processes. *Advances in Applied Probability 38*(1), 149–170.

Mertz, P. (1965, April). Impulse noise and error performance in data transmission. Technical Report RM-4526-PR, Rand Corp.

Messali, Z. and F. Soltani (2007). Performance of distributed cfar processors in pearson distributed clutter. *EURASIP Journal on Advances in Signal Processing 2007*, 1–7.

Metzler, R., A. V. Chechkin, and J. Klafter (2007). Lévy statistics and anamalous transport: Lévy flights and subdiffusion. Technical report. http://arxiv.org/abs/0706.3553v1.

Metzler, R., J.-H. Jeon, A. G. Cherstvy, and E. Barkai (2014). Anomalous diffusion models and their properties: non-stationarity, non-ergodicity, and ageing at the centenary of single particle tracking. *Phys. Chem. Chem. Phys. 16*, 24128–24164.

Metzler, R. and J. Klafter (2000). The random walk guide to anamalous diffusion: a fractional dynamics approach. *Physics Reports 339*, 1–77.

Metzler, R. and J. Klafter (2002). From stretched exponential to inverse power-law: fractional dynamics, Cole-Cole relaxation processes, and beyond. *J. Non-Crystalline Solids 305*, 81–87.

Miamee, A. G. and M. Pourahmadi (1988). Wold decomposition, prediction and parameterization of stationary processes with infinite variance. *Probab. Theory Related Fields 79*(1), 145–164.

Michael, J. R. (1983). The stabilized probability plot. *Biometrika 70*, 11–17.

Michaliček, J. (1972a). Der Anziehungsbereich von operator-stabilen Verteilungen im R_2. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete 25*, 57–70.

Michaliček, J. (1972b). Die Randverteilungen der operator-stabilen Masse im 2-dimensionalen Raum. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete 21*, 135–146.

Michna, Z. and I. Rychlik (1992a). Characteristics of upcrossings for stable processes. Technical report, Department of Math. Stat., Lund Institute of Technology.

Michna, Z. and I. Rychlik (1992b). Expected number of level crossings for certain symmetric α-stable processes. *Communications in Statistics - Stochastic Models 11*, 1–19.

Mihalas, D. (1978). *Stellar Atmospheres* (2nd ed.). San Francisco: Freeman.

Mihaylova, L., P. Brasnett, A. Achim, N. Canagarajah, and D. Bull (2005, July). A particle filtering with alpha-stable distributions. In *Proc. of the 13th IEEE Statistical Signal Processing Workshop*, Bordeaux, France, pp. 381–386. IEEE.

Mijnheer, J. (1975). Sample path properties of Stable Processes. In *Mathematical Centre Tracts*. Amsterdam: Mathematical Centrum. Vol. 59.

Mijnheer, J. L. (1972). A law of the iterated logarithm for the asymmetric stable law with characteristic exponent one. *Ann. Math. Statist. 43*, 358–362.

Mikosch, T. (1997). Heavy tailed modelling in insurance. *Comm. in Stat.-Stochastic Models*, 799–896.

Mikosch, T. (2006). Copulas: Tales and facts. *Extremes 9*(1), 3–20.

Mikosch, T., T. Gadrich, C. Klüppelberg, and R. J. Adler (1995). Parameter estimate for ARMA models with infinite variance innovations. *Ann. Statistics 23*(1), 305–326.

Mikosch, T., S. Resnick, H. Rootzén, and A. Stegeman (2002). Is network traffic approximated by stable Lévy motion or fractional Brownian motion? *Ann. Appl. Probab. 12*(1), 23–68.

Mikosch, T., S. Resnick, and G. Samorodnitsky (2000). The maximum of the periodogram for a heavy-tailed sequence. *Ann. Probab. 28*(2), 885–908.

Mikosch, T., G. Samorodnitsky, and L. Tafakori (2012). Fractional moments of solutions to stochastic recurrence equations. *Preprint*. http://legacy.orie.cornell.edu/gennady/techreports/FractionalMoments.pdf.

Mikosh, T. and I. K. Klyuppelberg (1995). On strong consistency of estimators for infinite variance time series. *Teor. Ĭmovīr. Mat. Stat.* (53), 116–125.

Millán, H., J. Rodríguez, B. Ghanbarian-Alavijeh, R. Biondi, and G. Llerena (2011). Temporal complexity of daily precipitation records from different atmospheric environments: Chaotic and levy stable parameters. *Atmospheric Research 101*, 879–892.

Millar, P. W. (1984). A general approach to the optimality of minimum distance estimators. *Trans. Amer. Math. Soc. 286*(1), 377–418.

Miller, G. (1969). Closed-form inversion of the Gram matrix arising in certain least-squares problems. *IEEE transactions on circuit theory 16*, 237–240.

Miller, G. (1978). Properties of certain symmetric stable distributions. *Journal of Multivariate Analysis 8*(3), 346–360.

Miller, K. S. and B. Ross (1991). Fractional Green's functions. *Indian J. Pure Appl. Math. 22*(9), 763–767.

Miller, K. S. and B. Ross (1995). *An introduction to the fractional calculus and fractional diffusion equations*. New York: Wiley.

Min, A. and C. Czado (2010a). Bayesian model selection for d-vine pair-copula constructions. *Canadian Journal of Statistics 39*(2), 239–258.

Min, A. and C. Czado (2010b). Bayesian model selection for multivariate copulas using pair-copula constructions. *Journal of Financial Econometrics 8*(4), 511–546.

Misiewicz, J. K. (1995). Infinite divisibility of sub-stable processes. I. Geometry of sub-spaces of L_α-space. *Stochastic Process. Appl. 56*(1), 101–116.

Misiewicz, J. K. (1996a). Infinite divisibility of sub-stable processes. II. Logarithm of probability measure. In *Proceedings of the XVII Seminar on Stability Problems for Stochastic Models, Part I (Kazan' 1995)*, Volume 81, pp. 2970–2979.

Misiewicz, J. K. (1996b). Some remarks on spectral representation for symmetric stable processes. In *Proceedings of the XVI Seminar on Stability Problems for Stochastic Models, Part II (Eger, 1994)*, Volume 78, pp. 87–94.

Misiewicz, J. K. (1996c). Sub-stable and pseudo-isotropic processes—connections with the geometry of sub-spaces of L_α-spaces. *Bull. Polish Acad. Sci. Math. 44*(2), 209–235.

Misiewicz, J. K. (1996d). Substable and pseudo-isotropic processes—connections with the geometry of subspaces of L_α-spaces. *Dissertationes Math. (Rozprawy Mat.) 358*, 91.

Misiewicz, J. K. and C. L. Scheffer (1990). Pseudo isotropic measures. *Nieuw Arch. Wisk. (4) 8*(2), 111–152.

Misiewicz, J. K. and K. Tabisz (2000). When an isotropic random vector is pseudo-isotropic. In *High dimensional probability, II (Seattle, WA, 1999)*, Volume 47 of *Progr. Probab.*, pp. 359–366. Boston, MA: Birkhäuser Boston.

Misiewicz, J. K. and S. Takenaka (2002). Some remarks on SαS, β - substable random vectors. *Probability and Mathematical Statistics 22*, 253 – 258.

Misra, N. and E. Kuruoglu (2016). Stable graphical models. *Journal of Machine Learning Research 17*.

Misra, N. and E. E. Kuruoglu (2014). Stable graphical models. *CoRR arxiv: abs/1404.4351*.

Mitra, S. S. (1981). Distribution of symmetric stable laws of index 2^{-n}. *Ann. Prob. 9*, 710–711.

Mitra, S. S. (1982). Stable laws of index 2^{-n}. *Ann. Prob. 10*, 857–859.

Mittnik, S. and S. Rachev (1993). Modeling asset returns with alternative stable distributions. *Economics Reviews 12*, 261–330.

Mittnik, S. and S. T. Rachev (1991). Alternative multivariate stable distributions and their applications to financial modeling. In S. C. et al. (Ed.), *Stable processes and related topics*, pp. 107–119. Boston, MA: Birkhäuser.

Miura, R. (1992). A note on look-back options based on order statistics. *Hitotsubashi Journal of Commerce and Management 27*, 15–28.

Miyaguchi, T. and Y. Aizawa (2001, 10). Dynamical Systems That Produce the Lévy Flights. *Progress of Theoretical Physics 106*(4), 697–704.

Modarres, R. and J. P. Nolan (1994). A method for simulating stable random vectors. *Computational Statistics 9*, 11–19.

Mohammadi, M. (2020). Principal component analysis for α-stable vectors. *Communications in Statistics - Simulation and Computation 0*(0), 1–19.

Mohammadi, M. and A. Mohammadpour (2009). Best linear prediction for α-stable random processes. *Statistics and Probability Letters 79*(21), 2266 – 2272.

Mohammadi, M. and A. Mohammadpour (2011). On the order statistics of α-stable distributions. Preprint.

Mohammadi, M., A. Mohammadpour, and H. Ogata (2014). On estimating the tail index and the spectral measure of multivariate α-stable distributions. *Metrika*.

Mohammadpour, A., A. Mohammad-Djafari, and J. P. Nolan (2006). A randomness test for stable data. In *CompStat 2006*, Rome, Italy.

Mohammadpour, A., A. Mohammad-Djafari, and J. a. P. Nolané (2006). A randomness test for stable data. *Journal of Statistical Research of Iran 3*(1).

Mohammadpour, A. and A. R. Soltani (2000). Exchangeable stable random vectors and their simulations. *Comput. Statist. 15*(2), 205–217.

Mohammadpour, A. and A. R. Soltani (2004). On simulating exchangeable sub-Gaussian random vectors. *Statist. Probab. Lett. 69*(1), 29–36.

Mohr, D. (1981). *Modelling data as a fractional Gaussian noise*. Ph. D. thesis, Princeton University, New Jersey.

Molchan, G. M. (2000). On the maximum of stable Lévy processes. *Teor. Veroyatnost. i Primenen. 45*(2), 380–386.

Molchanov, I. (2005). *Theory of random sets*. Probability and its Applications (New York). Springer-Verlag London, Ltd., London.

Molchanov, I. (2006). Convex geometry, stability and extreme values. Preprint.

Molchanov, I. (2008). Convex geometry of max-stable distributions. *Extremes 11*(3), 235–259.

Molchanov, I. (2009). Convex and star-shaped sets associated with multivariate stable distributions. I. Moments and densities. *J. Multivariate Anal. 100*(10), 2195–2213.

Molina-Muñoz, J.-E., A. Mora-Valencia, and J. Perote (2020, March). A new methodology for market-crash forecasting based on the alpha-stable distribution. Preprint.

Moltchanov, D. (2012). Distance distributions in random networks. *Ad Hoc Networks 10*(6), 1146–1166.

Molz, F. J., H. Rajaram, and S. L. Lu (2004). Stochastic fractal-based models of heterogeneity in subsurface hydrology: Origins, applications, limitations, and future research questions. *Reviews of Geophysics 42*(1), Article Number: RG1002.

Monrad, D. and L. D. Pitt (1987). Local nondeterminism and Hausdorff dimension. In *Seminar on stochastic processes, 1986 (Charlottesville, Va., 1986)*, Volume 13 of *Progr. Probab. Statist.*, pp. 163–189. Boston, MA: Birkhäuser Boston.

Monrad, D. and H. Rootzén (1995). Small values of gaussian processes and functional laws of the iterated logarithm. *Probab. Theory and Related Fields 101*, 173–192.

Montillet, J. P., X. He, and K. Yu (2019, Aug). Application of Levy Processes in Modelling (Geodetic) Time Series With Mixed Spectra. *arXiv e-prints*, arXiv:1908.11736.

Montillet, J.-P., X. He, K. Yu, and C. Xiong (2020). Application of Lévy processes in modelling (geodetic) time series with mixed spectra. *Nonlinear Processes in Geophysics Discussions 2020*, 1–29.

Montroll, E. W. and J. T. Bendler (1984). On Lévy (or stable) distributions and the Williams-Watt model of dielectric relaxation. *Journal of Statistical Physics 34*, 129–162.

Montroll, E. W. and M. F. Shlesinger (1982). On 1/f noise and other distributions with long tails. *Proc. Nat. Acad. Sci. USA 79*, 3380–3383.

Moran, P. (1964). On the range of cumulative sums. *Ann. Inst. Stat. Math. 16*, 109–112.

Mori, T. (1992). Representational of linearly additive random fields. *Probab. Theory Relat. Fields 92*, 91–115.

Moroni, M. and J. H. Cushman (2001). Statistical mechanics with three-dimensional particle tracking velocimetry experiments in the study of anomalous dispersion. II. Experiments. *Physics of Fluids 13*(1), 81–91.

Mörters, P. and Y. Peres (2010). *Brownian motion*, Volume 30 of *Cambridge Series in Statistical and Probabilistic Mathematics*. Cambridge University Press, Cambridge.

Mouri, H. (2015, Mar). Log-stable law of energy dissipation as a framework of turbulence intermittency. *arXiv 91*(3), 033017.

Mousavi, S. S., A. Mohammadpour, and H. Baghishani (2023). Hierarchical clustering with spatial adjacency constraints in heavy-tailed areal data. *Communications in Statistics - Simulation and Computation TBD*, 1–21.

Moutinho Cordeiro, G. and R. dos Santos Brito (2012, 02). The beta power distribution. *Braz. J. Probab. Stat. 26*(1), 88–112.

Mselmi, F. (2018a). Lévy processes time-changed by the first-exit time of the inverse Gaussian subordinator. *Filomat 32*(7), 2545–2552. https://doi.org/10.2298/FIL1807545M.

Mselmi, F. (2018b, 10). The stable processes on symmetric matrices. *Arab Journal of Mathematical Sciences 24*(1), 63–69. https://doi.org/10.1016/j.ajmsc.2017.09.002.

Muñoz-Rodriguez, D., S. V. Reyes, C. V. Rosales, M. A. Bernal, D. Torres-Román, and L. Rizo-Dominguez (2006). Heavy tailed network delay: an alpha-stable model. Technical Report 10, No. 1, Computación y Sistemas, Instituto Politécnico Nacional, Mexico.

Mukherjee, M. C. and M. Sambandham (2002). Random trigonometric polynomials with stable distributions. In *Proceedings of Neural, Parallel, and Scientific Computations. Vol. 2*, Atlanta, GA, pp. 79–82. Dynamic.

Muller, M. E. (1956). Some continuous Monte Carlo methods for the Dirichlet problem. *The Annals of Mathematical Statistics 27*(3), 569–589.

Müller, U., M. Dacorogna, R. Davé, R. Olsen, O. Pictet, and J. von Weizsäker (1995). Volatilities of different time resolutions - analyzing the dynamics of market components. Journal of Empirical Finance, to appear.

Muren, J., V. Niklasson, D. Otryakhin, and M. Romashin (2021, 12). Fast automatic deforestation detectors and their extensions for other spatial objects. arXiv:2112.01063v1.

Muren, J., V. Niklasson, D. Otryakhin, and M. Romashin (2024). Automatic deforestation detectors based on frequentist statistics and their extensions for other spatial objects. *Environmetrics n/a*(n/a), e2848.

Murray, D. A. and R. J. McGough (2022a). Numerical spatial impulse response calculations for a circular piston radiating in a lossy medium. *The Journal of the Acoustical Society of America 151*(5), 3104–3115.

Murray, D. A. and R. J. McGough (2022b). Numerical spatial impulse response evaluations of lossy media. In *2022 IEEE International Ultrasonics Symposium (IUS)*, pp. 1–4.

Mutwiri, R. M., H. Mwambi, and R. Slotow (2019, January). An application of stable Paretian time series models to animal movement GPS telemetry data. *International Journal of Contemporary Applied Researches 6*(1), 90–102.

Muvunza, T. (2020). An alpha-stable approach to modelling highly speculative assets and cryptocurrencies. *SSRN: https://ssrn.com/abstract=3505859*. http://dx.doi.org/10.2139/ssrn.3505859.

N. Henze, Z. H. and S. Meintanis (2014). Testing for spherical symmetry via the empirical characteristic function. *Statistics 48*(6), 1282–1296.

Nadarajah, S. (2003). The Kotz-type distribution with applications. *Statistics 37*(4), 341–358.

Nagaev, A. (1969a). Integral limit theorems for large deviations when cramér's condition is not fulfilled i,ii. *Theory of Probability and Its Applications 14*, 51–64 and 193–208.

Nagaev, A. (1969b). Limit theorems for large deviations where cramér's conditions are violated. *Izv. Akad. Nauk UzSSR Ser. Fiz.–Mat. Nauk 6*, 17–22. In Russian.

Nagaev, A. (1978). Integral theorems for sums of ladder epochs. pp. 110–122. In Russian.

Nagaev, A. (1979a). Local theorems for sums of ladder epochs. pp. 162–171. In Russian.

Nagaev, A. (1983a). On the asymmetric large deviations problem in the case of a stable limit law. *Teor. Veroyatnost. i Primenen 34*(4), 637–647. In Russian; English translation: Theory Probab. Appl., Vol. 28, 4, 670–680.

Nagaev, A. (1983b). *A representation of the generating function of a ladder pair*, pp. 158–161. Fan, Tashkent. In Russian.

Nagaev, A. (1985). The domain of attraction of the joint distribution of a ladder pair in the case of a recurrent random walk. *Izv. Akad. Nauk UzSSR, Ser. Fiz. Mat. Nauk 3*, 32–35.

Nagaev, A. (1996). Limit theorems in testing stability. *Journ. of Math. Sciences 78*(1), 95–101.

Nagaev, A. (1998). The Cramer large deviations when the extreme conjugate distribution is heavy–tailed. *Prob. Theory Appl.* (3), 456–475. In Russian.

Nagaev, A. (2000). On non-parametric estimation of the Poisson spectral measure of a stable law. *Journal of Math. Sciences 106*(2), 2854–2859.

Nagaev, A. (2002). Asymptotic properties of stable densities and the asymmetric large deviation problems. PUB. IRMA, LILLE, 57 X, 1-11.

Nagaev, A. (2003a). Asymptotic properties of stable densities and the asymmetric large deviation problems. *Statistics and Probability Letters 61*(4), 29 – 438.

Nagaev, A. (2007). Asymptotic properties of the multidimensional stable densities and the asymmetric large deviation problems. *Theory Probab. & Appl. 51*(4), 626 – 644.

Nagaev, A. and I. Khamdamov (2002). On the role of extreme summands in sum of random variables. *Prob. Theory Appl. 47*(3), 575–583. In Russian.

Nagaev, A. and T. Schreiber (2000). Remarks on a problem of non-parametric statistics of elliptically contoured distributions. Publ. IRMA, Lille, Vol. 50, No. 1, 1–8.

Nagaev, A. and S. Shkolnik (1983a). *An invariant classification procedure*, pp. 161–169. Fan, Tashkent. In Russian.

Nagaev, A. and S. Shkolnik (1983b). On a family of distributions concerned with stable laws. UzNIINTI 87, D, 1–16, In Russian.

Nagaev, A. and S. Shkolnik (1984). On invariant estimation of the characteristic index of stable distributions. UzNIINTI, no. 233, D, 1–22 (In Russian).

Nagaev, A. and S. Shkolnik (1985a). A family of probability distributions. *Mat. Zametki 37*(4), 594–598. In Russian; English translation: Math. Notes, vol. 37, 3-4 (1985), 328–330.

Nagaev, A. and S. Shkolnik (1985b). Some properties of the ratio of two random variables with stable distributions. *Izv. Akad. Nauk UzSSR, Ser. Fiz. Mat. Nauk 1*, 35–40. In Russian.

Nagaev, A. and S. Shkolnik (1987). Properties of mode of spectral positive stable distributions. In *Stability problems for stochastic models. Varna, 1985, Lecture Notes in Math., 1233*, pp. 69–78. Springer, Berlin-New York.

Nagaev, A. and S. Shkolnik (1988). Some properties of symmetric stable distributions that are close to the normal distribution. *Teor. Veroyatnost. i Primenen. 33*(1), 150–154. In Russian; English Translation: Theory Probab. Appl., Vol. 33, 1 (1988), 139–144.

Nagaev, A. and S. Shkolnik (1989). *Stability problems for stochastic models. Sukhumi, 1987, Lecture Notes in Math., 1412*, Chapter Some asymptotic properties of the stable laws, pp. 229–238. Springer, Berlin.

Nagaev, A. and S. Shkolnik (1995). Asymptotic properties of symmetric stable distributions with small index. *Journ. of Math. Sciences 76*(2), 2299–2306.

Nagaev, A. and S. Tkachuk (1974). Conditions under which the ladder epoch belongs to the domain of attraction of a stable law. In *Random processes and statistical inference*, Number 4, pp. 118–123. Fan, Tashkent. In Russian.

Nagaev, A. and A. Zaigraev (2003). New large deviation local theorem for sums of i.i.d. random vectors when the limit distribution is α- stable.

Nagaev, A. V. (2003b). Asymptotic properties of stable densities and the asymmetric large deviation problems. *Statist. Probab. Lett. 61*(4), 429–438.

Nagaev, S. V. (1979b). Large deviations of sums of independent random variables. *Annals of Probability 7*, 745–789.

Nagaev, S. V. (1981). On the asymptotic behavior of one-sided large deviation probabilities. *Theory of probability and its applications 726*(2), 362–366.

Nagaev, S. V. (1994). On accuracy of approximation with stable laws. In Grigelionis and et al. (Eds.), *Probab. Theory and Math. Statist. B.*, pp. 591–604.

Nan, T. (2014). *Scaling and extreme value statistics of sub-Gaussian fields with application to neutron porosity data*. Ph.d. thesis, The University of Arizona.

Nan, T., S. Neuman, M. Riva, and A. Guadagnini (2016). *Handbook of Groundwater Engineering*, Chapter Analyzing Randomly Fluctuating Hierarchical Variables and Extremes. CRC Press.

Nane, E., D. Wu, and Y. Xiao (2012). α-time fractional Brownian motion: PDE connections and local times. *ESAIM Probability and Statistics 16*, 1–24.

Nane, E., Y. Xiao, and A. Zeleke (2018, October). Strong laws of large numbers for arrays of random variables and stable random fields. *ArXiv e-prints*.

Naradh, K., R. Chifurira, and K. Chinhamu (2022, Jan.). Analysis of stock exchange risk and currency in south african financial markets using stable parameter estimation. *International Journal of Finance& Banking Studies (2147-4486) 11*(1), 120–131.

Naseri, H., S. E. Najafi, and A. Saghaei (2019). Dea model considering outputs with stochastic noise and a heavy-tailed (stable) distribution. *INFOR: Information Systems and Operational Research*. DOI: 10.1080/03155986.2019.1624476.

Naseri, H., S. E. Najafi, and A. Saghaei (2020). Statistical process control (spc) for short production run with cauchy distribution, a case study with corrected numbers approach. *Communications in Statistics - Theory and Methods 49*(4), 879–893.

Nava-Tudela, A. (2017, February). A recommender system to restore images with impulse noise. *ArXiv e-prints*.

Navarro, J. (2020). Bivariate box plots based on quantile regression curves. *Dependence Modeling 8*(1), 132 – 156.

Nelder, J. A. and R. Mead (1965). A simplex method for function minimization. *Computer Journal 7*, 308–313.

Nelsen, R. B. (1999). *An introduction to copulas*, Volume 139 of *Lecture Notes in Statistics*. New York: Springer-Verlag.

Nelson, J. (2011, June). *Sketching and streaming high-dimensional vectors*. Ph.D. thesis, MIT, Computer Science and Engineering.

Newman, C. (1981). Self-similar random fields in mathematical physics. In G. Goldin and R. Wheeler (Eds.), *Measure Theory and Applications*.

Newman, C. M. and B. W. Stuck (1979). Optimal sampling of independent increment processes. *Stochastics 2*, 213–225.

Nguyen, N., K. Dogancay, and E. Kuruoglu (2019). An iteratively reweighted instrumental-variable estimator for robust 3-D AOA localization in impulsive noise. *IEEE Transactions on Signal Processing 67*(18), 4795–4808.

Nguyen, T. T. (1995). Conditional distributions and characterizations of multivariate stable distribution. *J. Multivariate Anal. 53*(2), 181–193.

Nguyen, T. T. and A. R. Sampson (1991). A note on characterizations of multivariate stable distributions. *Ann. Inst. Statist. Math. 43*(4), 793–801.

Nikias, C. L. and M. Shao (1995). *Signal Processing with Alpha-Stable Distributions and Applications*. New York: Wiley.

Nikoloulopoulos, A. K., H. Joe, and H. Li (2009). Extreme value properties of multivariate t copulas. *Extremes 12*, 129–148.

Nikvand, N. (2008). Data denoising by noise invalidation. M.S. Thesis, Ryerson University, Toronto, Dept. of Electrical and Computer Engineering.

Nolan, J. P. (1988). Path properties of index-β stable fields. *Annals of Probability 16*, 1596–1607.

Nolan, J. P. (1989a). Continuity of symmetric stable processes. *Journal of Multiv. Analysis 29*, 84–93.

Nolan, J. P. (1989b). Local nondeterminism and local times for stable processes. *Prob.Th. and Rel. Fields 82*, 387–410.

Nolan, J. P. (1991). Bounded stationary stable processes and entropy. In *Stable processes and related topics (Ithaca, NY, 1990)*, Volume 25 of *Progress in Probability*, pp. 101–105. Boston, MA: Birkhäuser Boston.

Nolan, J. P. (1992). Correction: "Path properties of index-β stable fields" [Ann. Probab. **16** (1988), no. 4, 1596–1607; MR0958205 (89i:60086)]. *Ann. Probab. 20*(3), 1601–1602.

Nolan, J. P. (1997). Numerical calculation of stable densities and distribution functions. *Commun. Statist. -Stochastic Models 13*, 759–774.

Nolan, J. P. (1998a). Multivariate stable distributions: approximation, estimation, simulation and identification. In R. J. Adler, R. E. Feldman, and M. S. Taqqu (Eds.), *A Practical Guide to Heavy Tails*, pp. 509–526. Boston: Birkhauser.

Nolan, J. P. (1998b). Parameter estimation and data analysis for stable distributions. In *IEEE Proceedings of the 31st Asilomar Conference on Signal Processing*.

Nolan, J. P. (1998c). Parameterizations and modes of stable distributions. *Statistics and Probability Letters. 38*, 187–195.

Nolan, J. P. (1999a). An algorithm for evaluating stable densities in Zolotarev's (M) parameterization. *Mathematical and Computer Modelling 29*, 229–233.

Nolan, J. P. (1999b). Fitting data and assessing goodness-of-fit with stable distributions. In J. P. Nolan and A. Swami (Eds.), *Proceedings of the ASA-IMS Conference on Heavy Tailed Distributions*.

Nolan, J. P. (2001a). Maximum likelihood estimation of stable parameters. In O. E. Barndorff-Nielsen, T. Mikosch, and S. I. Resnick (Eds.), *Lévy Processes: Theory and Applications*, pp. 379–400. Boston: Birkhäuser.

Nolan, J. P. (2001b). Measures of dependence for symmetric stable distributions. In *Proceedings of the 2001 IEEE-EURASIP Workshop on Nonlinear Signal and Image Processing*.

Nolan, J. P. (2003). *Modeling financial distributions with stable distributions*, Volume 1 of *Handbooks in Finance*, Chapter 3, pp. 105–130. Amsterdam: Elsevier.

Nolan, J. P. (2005). Multivariate stable densities and distribution functions: general and elliptical case. Preprint, BundesBank November 2005 Conference, online at `www.academic2.american.edu/~jpnolan/stable/stable.html`, to appear in Computational Statistics, 2012.

Nolan, J. P. (2008, July). Advances in nonlinear signal processing for heavy tailed noise. International Workshop in Applied Probability 2008. Available at http://fs2.american.edu/jpnolan/www/stable/stable.html.

Nolan, J. P. (2010). Metrics for multivariate stable distributions. In *Stability in probability*, Volume 90 of *Banach Center Publ.*, pp. 83–102. Polish Acad. Sci. Inst. Math., Warsaw.

Nolan, J. P. (2012). R as a tool in computational finance. In *Handbook of computational finance*, Springer Handbook Comput. Stat., pp. 781–804. Heidelberg: Springer.

Nolan, J. P. (2013). Multivariate elliptically contoured stable distributions: theory and estimation. *Computational Statistics 28*(5), 2067–2089.

Nolan, J. P. (2014). Financial modeling with heavy tailed stable distributions. *WIREs Comput. Stat. 6*(1), 45–55. doi: 10.1002/wics.1286.

Nolan, J. P. (2015a). *mvmesh: Multivariate Meshes and Histograms in Arbitrary Dimensions*. CRAN. R package, online at `https://cran.r-project.org/web/packages/mvmesh/`.

Nolan, J. P. (2015b). *SimplicialCubature: Integration of Functions Over Simplices*. CRAN. R package, online at `https://cran.r-project.org/web/packages/SimplicialCubature/`.

Nolan, J. P. (2015c). *SphericalCubature: Numerical integration over spheres and balls in n-dimensions; multivariate polar coordinates*. CRAN. R package, online at `https://cran.r-project.org/web/packages/SphericalCubature/`.

Nolan, J. P. (2016a). *ecdfHT: Empirical CDF for Heavy Tailed Data*. CRAN. R package, online at `https://cran.r-project.org/ web/packages/ecdfHT/`.

Nolan, J. P. (2016b). *gensphere: Generalized Spherical Distributions*. CRAN. R package, online at `https://cran.r-project.org/web/packages/gensphere/`.

Nolan, J. P. (2016c). An R package for modeling and simulating generalized spherical and related distributions. *J. Statistical Distributions and Applications 3*(14).

Nolan, J. P. (2017). Erlang models for multilocus probabilities. *J. of Statistical Distributions and Applications 4*(10). https://doi.org/10.1186/s40488-017-0064-5.

Nolan, J. P. (2018, jun). Truncated fractional moments of stable laws. *Statistics & Probability Letters 137*, 312–318.

Nolan, J. P. (2019). Stable distributions and Green's functions for fractional diffusions. *Fractional Calculus and Applied Analysis 22*(1).

Nolan, J. P. (2020a). A graphical diagnostic for heavy tailed data. *Applied Stochastic Models in Business and Industry 36*(6), 1080–1091. https://doi.org/10.1002/asmb.2590.

Nolan, J. P. (2020b). *Univariate Stable Distributions - Models for Heavy Tailed Data*. New York: Springer Verlag. Chapter 1 online at https://edspace.american.edu/jpnolan.

Nolan, J. P. (2021). Computational aspects of stable distributions. *WIREs Computational Statistics*, e1569.

Nolan, J. P. (2023a). Multivariate stable cumulative probabilities in polar form and related functions. In progress.

Nolan, J. P. (2023b). Zolotarev-type integrals for multivariate stable functions. In progress.

Nolan, J. P. (2024). *Multivariate Stable Distributions - Models for Heavy Tailed Data*. New York: Springer Verlag. In progress.

Nolan, J. P., D. J. Audus, and J. F. Douglas (2024). Computation of Riesz α-capacity C_α of general sets in $\mathbb{R}^d$ using stable random walks. *SIAM Journal on Applied Mathematics 84*(2), 317–337.

Nolan, J. P., J. G. Gonzalez, and R. C. Núñez (2010). Stable filters: A robust signal processing framework for heavy-tailed noise. In *Proceedings of the 2010 IEEE Radar Conference*, pp. 470–473.

Nolan, J. P. and D. Ojeda-Revah (2013). Linear and nonlinear regression with stable errors. *J. of Econometrics 172*, 186–194.

Nolan, J. P., A. Panorska, and J. H. McCulloch (2001). Estimation of stable spectral measures. *Mathematical and Computer Modelling 34*, 1113–1122.

Nolan, J. P. and A. K. Panorska (1997). Data analysis for heavy tailed multivariate samples. *Comm. in Stat. - Stochastic Models 13*, 687–702.

Nolan, J. P. and B. Rajput (1995). Calculation of multidimensional stable densities. *Commun. Statist. - Simula. 24*, 551–556.

Nolan, J. P. and N. Ravishanker (2009). Simultaneous prediction intervals for ARMA proceses with stable time innovations. *J. of Forecasting 28*, 235–246.

Nolan, J. P. and Z. Sinkala (1987). Equivalent norms on analytic subspaces of L^p. *J. Math. Anal. Appl. 126*(1), 238–249.

Nolan, J. P. and A. Swami (Eds.) (1999). *Proceedings of the ASA-IMS Conference on Heavy Tailed Distributions*, Washington, DC.

Norvaisa, R. and G. Samorodnitsky (1992). Stable processes with sample paths in Orlicz spaces. *Annals of Probability 22*, 1904–1929.

Novák, T. (2006a). Improved description of Bose-Einstein correlation function. *Acta Phys. Hung. A25*, 135–139.

Novák, T. (2006b). Shortest movie: Bose-Einstein correlation functions in e+ e- annihilations.

Novák, T. (2008). Bose-Einstein correlations in e+e- annihilation. PhD Thesis, University of Nijmegen, Nijmegen, The Netherlands. pp. 1–135.

Novák, T. (2018). PHENIX results on three-particle Bose-Einstein correlations in $\sqrt{S_{NN}} = 200$ GeV Au+Au collisions. *Universe 4*, 57.

Novák, T., T. Csörgő, W. Kittel, and W. J. Metzger (2007). Parametrization of Bose-Einstein correlations and reconstruction of the source function in hadronic Z-boson decays using the L3 detector. *Braz. J. Phys. 37*, 689–693.

Novák, T., T. Csörgő, W. Kittel, and W. J. Metzger (2009). Initial conditions, time evolution and BE correlations in e+e- annihilation. *Acta Phys. Polon. B40*, 919–924.

Núñez, R. C., J. G. Gonzalez, G. R. Arce, and J. P. Nolan (2008). Fast and accurate computation of the myriad filter via branch-and-bound search. *IEEE Transactions on Signal Processing 56*, 3340–3346.

Nuyts, J. (2010). Inference about the tail of a distribution: Improvement on the hill estimator. *International Journal of Mathematics and Mathematical Sciences 2010*. https://doi.org/10.1155/2010/924013.

Nuzzo, R. (2014). Scientific method: Statistical errors. *Nature 506*, 150–152.

O'Brien, G. and W. Vervaat (1983). Marginal distributions of self-similar processes with stationary increments. *Zeitschrift für Wahrscheinlichkeitstheorie und verwandte Gebiete 64*, 129–138.

O'Brien, G. and W. Vervaat (1985). Self-similar processes with stationary increments generated by point processes. *Ann. Prob. 13*, 28–52.

Obuchowicz, A. (2019). *Stable Distributions*, pp. 23–48. Springer International Publishing.

Obuchowicz, A. and P. Pretki (2005). Isotropic symmetric α-stable mutations for evolutionary algorithms. In *2005 IEEE Congress on Evolutionary Computation*, Volume 1, pp. 404–410.

Obuchowicz, A. and P. Prkobuchetki (2004). Phenotypic evolution with a mutation based on symmetric α-stable distributions. *Int. J. Appl. Math. Comput. Sci. 14*(3), 289–316.

Obuchowicz, A. K. and M. Smolka (2016). Application of α-stable mutation in a hierarchic evolutionary inverse solver. *J. Comput. Sci. 17*(part 1), 261–269.

Ocone, D. (1983). Multiple integral expansions for nonlinear filtering. *Stochastics 10*, 1–30.

Odzijewicz, T., A. B. Malinowska, and D. F. M. Torres (2013). Green's theorem for generalized fractional derivatives. *Fract. Calc. Appl. Anal. 16*(1), 64–75.

Officer, R. (1972). The distribution of stock returns. *Journal of the American Statistical Association 76*, 807 – 812.

Ogata, H. (2010). Estimation for multivariate stable distributions with generalized empirical likelihood method. Preprint.

Ojeda-Revah, D. (2001). *Comparative study of stable parameter estimators and regression with stably distributed errors*. Ph. D. thesis, American University.

Oliinyk, V. and V. Lukin (2020). Time delay estimation for noise-like signals embedded in non-Gaussian noise using pre-filtering in channels. In *2020 IEEE 15th International Conference on Advanced Trends in Radioelectronics, Telecommunications and Computer Engineering (TCSET)*, pp. 638–643.

Oliinyk, V., V. Lukin, and I. Djurovic (2021). Time delay estimation for noise-like signals embedded in non-Gaussian noise using robust similarity measures. In *2021 10th Mediterranean Conference on Embdedded Computing (MECO)*, pp. 755–758.

Olshen, R. (1967). Asymptotic properties of the periodogram of a discrete stationary process. *J. of Applied Prob. 4*, 508–528.

Olver, F. W. J., D. W. Lozier, R. F. Boisvert, and C. W. Clark (2010). *NIST Handbook of Mathematical Functions*. Cambridge University Press.

Omelchenko, V. (2010). Elliptical stable distributions. *Mathematical Methods in Economics*, 483–488.

Oodaira, H. (1973). The law of the iterated logarithm for Gaussian processes. *Ann. Prob. 1*, 954–967.

Opitz, T., R. Huser, H. Bakka, and H. Rue (2018). INLA goes extreme: Bayesian tail regression for the estimation of high spatio-temporal quantiles. *Extremes 21*, 441–462. https://doi.org/10.1007/s10687-018-0324-x.

Orey, S. (1971). *Limit Theorems for Markov Chain Transition Probabilties*. London: Van Nostrand Reinold.

Ortobelli, S., I. Huber, and E. Schwartz (2002a). Portfolio selection with stable distributed returns. *Mathematical Methods of Operations Research 55*, 265–300.

Ortobelli, S., I. Huber, and E. Schwartz (2002b). Portfolio selection with stable distributed returns. *Math. Methods Oper. Res. 55*(2), 265–300. Special issue on mathematical models in market and credit risk.

Ortobelli, S. and S. Rachev (2005, November). Risk management and dynamic portfolio selection with stable praetian distributions. Preprint, BundesBank November 2005 Conference.

Ortobelli, S., S. T. Rachev, I. Huber, and A. Biglova (2004). *Handbook of Computational and Numerical Methods in Finance*, Chapter Optimal Portfolio Selection and Risk Management: A Comparison between the Stable Paretian Approach and the Gaussian one, pp. 197–252. Boston: Birkhäuser.

Osler, T. J. (1970). The fractional derivative of a composite function. *SIAM Journal on Mathematical Analysis 1*(2), 288–293.

Otero, D. and G. R. Arce (2011a). Generalized restricted isometry property for alpha-stable random projections. See IEEE (2011), pp. 3676–3679.

Otero, D. and G. R. Arce (2011b, May). Generalized restricted isometry property for alpha-stable random projections. In *2011 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)*, pp. 3676–3679.

Otiniano, C., T. Sousa, and P. Rathie (2013). Stable random variables: Convolution and reliability. *Journal of Computational and Applied Mathematics 242*, 1 – 11.

Ott, A., J.-P. Bouchaud, D. Langevin, and W. Urbach (1990). Anomalous diffusion in "living polymers": a genuine lévy flight. *Phys. Rev. Letters 65*, 2201=2204.

Otto, A., A. Bekker, J. Ferreira, and O. Arslan (2024). Alternative skew laplace scale mixtures for modeling data exhibiting high-peaked and heavy-tailed traits. *Japanese Journal of Statistics and Data Science*. https://doi.org/10.1007/s42081-024-00251-4.

Pad, P. and M. Unser (2015, September). Optimality of operator-like wavlets for representing sparse AR(1) processes. *IEEE Trans. on Signal Processing 63*(18), 4827–4837.

Padash, A., A. V. Chechkin, B. Dybiec, M. Magdziarz, B. Shokri, and R. Metzler (2020, jun). First passage time moments of asymmetric Lévy flights. *Journal of Physics A: Mathematical and Theoretical 53*(27), 275002.

Padash, A., A. V. Chechkin, B. Dybiec, I. Pavlyukevich, B. Shokri, and R. Metzler (2019). First passage properties of asymmetric Lévy flights. *Journal of Physics A: Mathematical and Theoretical*. https://doi.org/10.1088/1751-8121/ab493e.

Padilla, P., J. Górriz, J. Ramírez, D. Salas-González, and I. Illán (2015). Intensity normalization in the analysis of functional DaTSCAN SPECT images: The α-stable distribution-based normalization method vs other approaches. *Neurocomputing 150*, 4 – 15.

Painter, S. (2001). Flexible scaling model for use in random field simulation of hydraulic conductivity. *Water Resources Research 37*(5), 1155–1163.

Painter, S., G. Geresford, and L. Paterson (1995). On the distribution of seismic reflection coefficients and seismic amplitudes. *Geophysics 60*(4), 1187–1194.

Pakes, A. G. (2003). Investigating the structure of truncated l/'evy-stable laws. *Lecture Notes-Monograph Series 40*, 49–78.

Pakes, A. G. (2010). Critical Markov branching process limit theorems allowing infinite variance. *Adv. in Appl. Probab. 42*(2), 460–488.

Pakshirajan, R. P. and R. Vasudeva (1977). A law of the iterated logarithm for stable summands. *Trans. Amer. Math. Soc. 232*, 33–42.

Palmowski, Z. and T. Rolski (1996). The superposition of alternating on–off flows and a fluid model. Technical Report 82, University of Wrocław.

Palombi, F. and S. Toti (2016, January). On the Power-Law Tails of Vote Distributions in Proportional Elections. *arXiv e-prints*, arXiv:1601.07060.

Palyulin, V. V., G. Blackburn, M. A. Lomholt, N. W. Watkins, R. Metzler, R. Klages, and A. V. Chechkin (2019, oct). First passage and first hitting times of Lévy flights and Lévy walks. *New Journal of Physics 21*(10), 103028.

Panas, E. (2001, 02). Estimating fractal dimension using stable distributions and exploring long memory through ARFIMA models in Athens Stock Exchange. *Applied Financial Economics 11*, 395–402.

Pander, T. (2003). Robust filtering of ECG signal with the myriad filter. *Polish Journal Of Medical Physics And Engineering 1*(9), 17–30.

Pander, T. (2004). Application of weighted myriad filters to suppress impulsive noise in biomedical signals. *TASK Quarterly 8*(2), 199–216.

Pander, T. (2006). The class of M-filters in the application of ecg signal processing. *Biocybernetics and Biomedical Engineering 26*(4), 3–13.

Pander, T. (2010). New polynomial approach to myriad filter computation. *Signal Process. 90*(6), 1991–2001.

Pander, T., A. Matonia, J. Wrobel, and J. Jezewski (2012). An application of the myriad filter for FHR baseline estimation. In *MEDSIP 2012*.

Pander, T. and T. Przybyła (2012). Impulsive noise cancelation with simplified Cauchy-based p-norm filter. *Signal Process. 92*(9), 2187–2198.

Panigrahi, A., R. Somani, N. Goyal, and P. Netrapalli (2019, October). Non-Gaussianity of Stochastic Gradient Noise. *arXiv e-prints*, arXiv:1910.09626.

Panorska, A. K. (1996). Generalized stable models for financial asset returns. *Journal of Computational and Applied Mathematics 70*, 111–114.

Pantalone, C., J. McCarthy, and H. Li (to appear, 2016). An analysis of energy futures. *Journal of Energy Markets*. Bryant Univesity, Finance Department.

Panton, D. (1992). Cumulative distribution function values for symmetric standardized stable distributions. *Statist. Simula. 21*, 458–492.

Paolella, M. S. (2007). *Intermediate Probability: A Computational Approach*. Chichester: John Wiley.

Paolella, M. S. (2015, August). Tests for the stable Paretian distribution. preprint.

Paradisi, P., R. Cesari, F. Mainardi, and F. Tampieri (2001). The fractional Fick's law for non-local transport processes. *Physica A 293*, 130–142.

Pardo, M. (2003). A test for uniformity based on informational energy. *Statistical Papers 44*, 521–534. doi:10.1007/BF02926008.

Parulekar, M. and A. M. Makowski (1996). Tail probabilities for a multiplexer with a self-similar traffic. *Proceedings of the 15th Annual IEEE INFOCOM*, 1452–1459.

Parzen, E. (1962). *Stochastic Processes*. San Francisco: Holden-Day.

Paulauskas, V. I. (1974a). Estimates of the remainder term in a limit theorem in the case of a stable limit law. *Litovsk. Mat. Sb. 14*(1), 165–187, 231–232.

Paulauskas, V. I. (1974b). Estimation of the rate of convergence in a multidimensional limit theorem in the case of a stable limit law. *Dokl. Akad. Nauk SSSR 219*, 43–45.

Paulauskas, V. I. (1974c). Uniform and nonuniform estimates of the remainder term in a limit theorem with stable limit law. *Litovsk. Mat. Sb. 14*(4), 171–185, 241.

Paulauskas, V. I. (1975). The rate of convergence in the multidimensional limit theorem in the case of a stable limit law. *Litovsk. Mat. Sb. 15*(1), 207–228, 257.

Paulauskas, V. I. (1976). Some remarks on multivariate stable distributions. *J. Multivar. Anal. 6*, 356–368.

Paulauskas, V. I. (1978). Infinitely divisible and stable laws in separable Banach spaces. I. *Litovsk. Mat. Sb. 18*(4), 101–114, 201.

Paulauskas, V. I. (1982). Convergence to stable laws and their simulation. *Litovsk. Mat. Sb. 22*(3), 146–156.

Paulauskas, V. I. (2003). A new estimator for tail index. *Acta Applicandae Mathematicae 79*, 55–67.

Paulauskas, V. I. (2009). On the rate of convergence to bivariate stable laws. *Lith. Math. J. 49*(4), 426–445.

Paulauskas, V. I. and S. T. Rachev (2003). Maximum likelihood estimators in regression models with infinite variance innovations. *Statistical Papers 4*, 47 – 65.

Paulauskas, V. I. and A. Y. Rachkauskas (1984a). Operators of stable type. *Litovsk. Mat. Sb. 24*(2), 145–159.

Paulauskas, V. I. and A. Y. Rachkauskas (1984b). Operators of stable type. *Dokl. Akad. Nauk SSSR 275*(2), 306–309.

Paulauskas, V. I. and A. Račkauskas (1980). Infinitely divisible and stable laws in separable Banach spaces. II. *Litovsk. Mat. Sb. 20*(4), 97–113, 210.

Paulauskas, V. I. and D. Surgailis (2007). On the rate of approximation in limit theorems for sums of moving averages. *Teor. Veroyatn. Primen. 52*(2), 405–414.

Paulauskas, V. I. and M. Vaiciulis (2011). Several modifications of DPR estimator of the tail index. *Lithuanian mathematical journal 51*(1), 36–50.

Paulson, A. S. and T. A. Delehanty (1993). Tables of the fractiles of the stable law. Technical report, Renesselaer Polytechnic Institute, Troy, NY.

Paulson, A. S., E. W. Holcomb, and R. Leitch (1975). The estimation of the parameters of the stable laws. *Biometrika 62*, 163–170.

Paxson, V. and S. Floyd (1994). Wide area traffic: the failure of Poisson modelling. *IEEE/ACM Transactions on Networking 3*, 226–244.

Peach, G. (1981). Theory of the pressure broadening and shift of spectral lines. *Advances in Physics 30*(3), 367–474.

Peirce, W. H. (1957). Numerical integration over the spherical shell. *Mathematical Tables and Other Aids to Computation 11*(60), 244–249.

Peiris, M. and B. Perera (1988). On prediction with fractionally differenced ARIMA models. *Journal of Time Series Analysis 9*, 215–220.

Pelekanakis, K., D. Green, Y. Fountzoulas, R. Petroccia, S. Fioravanti, J. Alves, and S. Blouin (2018, 09). A modem design for underwater acoustic networking in the high north. www.researchgate.net.

Peligrad, M. (1990). On Ibragimov-Iosifescu conjecture for ϕ-mixing sequences. *Stochastic Process. Appl. 35*(2), 293–308.

Pena, D., A. Lima, V. A. d. Junior, L. F. Silveira, and A. Medeiros (2020, Apr.). Robust time delay estimation based on non-gaussian impulsive acoustic channel. *Journal of Communication and Information Systems 35*(1), 86–89.

Peña, V., H. Gzyl, S. Mayoral, and H. Zou (2022, April). Prediction and estimation of random variables with infinite mean or variance. https://www.researchgate.net/publication/359802349.

Penson, K. A. and K. Górska (2010). Exact and explicit probability densities for one-sided levy stable distributions. *Physical Review Letters 105*(21), 210604.

Pentari, A., G. Tzagkarakis, K. Marias, and P. Tsakalides (2021). Graph-based denoising of eeg signals in impulsive environments. In *2020 28th European Signal Processing Conference (EUSIPCO)*, pp. 1095–1099.

Percival, D. (1983). *The statistics of long memory processes.* Ph. D. thesis, University of Washington.

Pereyra, M. and H. Batatia (2012, 01). Modeling ultrasound echoes in skin tissues using symmetric alpha-stable processes. *IEEE transactions on ultrasonics, ferroelectrics, and frequency control 59*, 60–72.

Peters, E. E. (1994). *Fractal Market Analysis.* NY: Wiley.

Peters, G., S. Sisson, and Y. Fan (2012). Likelihood-free Bayesian inference for α-stable models. *Computational Statistics and Data Analysis 56*(11), 3743 – 3756. 1st issue of the Annals of Computational and Financial Econometrics Sixth Special Issue on Computational Econometrics.

Petersen, K. (1983). *Ergodic Theory.* Cambrdge: Cambridge University Press.

Peterson, J., P. Georgiou, and C. Kyriakakis (2003). The use of fractional lower-order statistics in acoustical environments. In *Thirty-Seventh Asilomar Conference on Signals, Systems and Computers*, Volume 1, pp. 781–785. IEEE.

Petropulu, A. P., J.-C. Pesquet, and X. Yang (2000). Power-law shot noise and its relationship to long-memory α-stable processes. *IEEE Transactions On Signal Processing 48*(7), 1883.

Petropulu, A. P., R. Wang, and K. Piccoli (1996, Nov.). Modeling the ultrasound backscattered signal using α-stable distributions. In *Ultrasonics Symposium*, Volume 2, pp. 1093 – 1096. IEEE.

Petrov, V. (1975). *Sums of Independent Random Variables.* New York: Springer-Verlag.

Petrov, V. (1995). *Limit Theorems of Probability Theory.* Oxford: Oxford University Press.

Pewsey, A. (2008). The wrapped stable family of distributions as a flexible model for circular data. Computational Statistics and Data Analysis.

Phan, V. H. M., F. Schulze, P. Mertsch, S. Recchia, and S. Gabici (2021, 05). Stochastic fluctuations of low-energy cosmic rays and the interpretation of Voyager data. Preprint on Researchgate.

Pickands, J. (1975). Statistical inference using extreme order statistics. *Ann. Stat. 3*, 119–131.

Pickands, J. (1981). Multivariate extreme value distributions. In *Proceedings of the 43rd session of the International Statistical Institute, Vol. 2 (Buenos Aires, 1981)*, Volume 49, pp. 859–878, 894–902. With a discussion.

Pierce, R. D. (1996). RCS characterization using the alpha-stable distribution. In *Proceedings of the National Radar Conference*, pp. 154–159. IEEE Press.

Pierce, R. D. (1997). Application of the positive α stable distribution. In *Signal Processing Workshop on Higher-Order Statistics*. IEEE Press.

Piessens, R., E. deDoncker Kapenga, C. W. Überhuber, and D. K. Kahaner (1983). *QUADPACK: A subroutine package for automatic integration*. New York: Springer-Verlag.

Pinelis, I. (2007). Exact inequalities for sums of asymmetric random variables, with applications. *Probab. Theory Related Fields 139*(3-4), 605–635.

Pinelis, I. (2011). Positive-part moments via the Fourier-Laplace transform. *Journal of Theoretical Probability 24*(2), 409–421.

Pinelis, I. (2016). Positive-part moments via characteristic functions, and more general expressions. *Journal of Theoretical Probability*, 1–29.

Pipiras, V., M. S. Taqqu, and P. Abry (2007). Bounds for the covariance of functions of infinite variance stable random variables with applications to central limit theorems and wavelet-based estimation. *Bernoulli 14*(4), 1091–1123.

Pisier, G. (1983). Some applications of the metric entropy condition to harmonic analysis. In *Banach Spaces, Harmonic Analysis and Probability*, pp. 123–154. University of Connecticut: Springer Verlag. Lecture Notes in Math. Vol. 995.

Pitera, M., A. Chechkin, and A. Wylomanska (2021). Goodness-of-fit test for α-stable distribution based on the quanitle conditional variance statistics. https://doi.org/10.1007/s10260-021-00571-9.

Pitman, E. J. G. (1980). Subexponential distribution functions. *Journal of Australian Mathematical Society, Series A 29*, 337–347.

Pitman, E. J. G. and J. Pitman (2016). A direct approach to the stable distributions. *Advances in Applied Probability 48*(A), 261–282.

Pitt, H. R. (1958). *Tauberian Theorems*. London: Oxford University Press.

Pitt, L. (1978). Local times for gaussian vector fields. *Indiana Univ. Math. Journal 27*, 309–330.

Pitt, L. (1982). Positively correlated normal variables are associated. *The Annals of Probability 10*, 496–499.

Pittel, B., W. A. Woyczyński, and J. A. Mann (1990). Random tree type partitions as a model for acyclic polymerization: Holtsmark (3/2-stable) distribution of the supercritical gel. *Ann. Prob. 18*, 319–341.

Pivato, M. (2001). *Analytical methods for multivariate stable probability distributions*. Ph. D. thesis, Toronto, Mathematics Department.

Pivato, M. and L. Seco (2003). Estimating the spectral measure of a multivariate stable distribution via spherical harmonic analysis. *J. Multivar. Anal. 87*(2), 219–240.

Pizurica, A. and W. Philips (2006, March). Estimating the probability of the presence of a signal of interest in multiresolution single- and multiband image denoising. *IEEE Transactions on Image Processing 15*(3), 654–665.

Plikusas, A. (1980). Estimation of cumulants and large deviations for certain nonlinear transformations of a stationary Gaussian process. *Lithuanian Mat. Journal 20*(2), 150–156.

Plikusas, A. (1981). Some properties of the multiple Itô integral. *Lithuanian Mat. Journal 21*(2), 184–191.

Plocoste, T., R. Calif, L. Euphrasie-Clotilde, and F.-N. Brute (2020). The statistical behavior of PM10 events over Guadeloupean archipelago: Stationarity, modelling and extreme events. *Atmospheric Research 241*(1), 104956.

Płonka, A. (1991). Developments in dispersive kinetics. *Prog. Reaction Kinetics 16*, 157–333.

Płonka, A. and A. Paszkiewicz (1992). Kinetics in dynamically disordered systems: Time scale dependence of reaction patterns in condensed media. *J. Chem. Phys. 96*, 1128–1133.

Podgórski, K. (1992). A note on ergodic symmetric symmetric stable processes. *Stochastic Processes and their Applications 43*, 355–362.

Pollard, D. (1984). *Convergence of Stochastic Processes*. Springer-Verlag.

Pólya, G. (1923a). Herleitung des Gauss'schen Fehlergesetzes aus einer Funktionalgleichung. *Math. Zeit. 18*, 96–108.

Pólya, G. (1923b). On the zeros of an integral function represented by Fourier's integral. *Messenger of Math. 52*, 185–188.

Pólya, G. and G. Szegö (1931). Über den transfiniten Durchmesser (Kapazitätskonstante) von ebenen und räumlichen Punktmengen. *J. Reine Angew. Math. 165*, 4–49.

Pólya, G. and G. Szegö (1951). *Isoperimetric Inequalities in Mathematical Physics*. Annals of Mathematical Studies. Princeton University Press.

Port, S. C. (1990). Asymptotic expansions for the expected volume of a stable sausage. *The Annals of Probability 18*(2), 492–523.

Port, S. C. and C. J. Stone (1972a). Classical potential theory and Brownian motion. In L. M. L. Cam, J. Neyman, and E. L. Scott (Eds.), *Berkeley Symp. on Math. Statist. and Prob.*, Volume 6.3, pp. 143–176.

Port, S. C. and C. J. Stone (1972b). Logarithmic potentials and planar Brownian motion. In L. M. L. Cam, J. Neyman, and E. L. Scott (Eds.), *Berkeley Symp. on Math. Statist. and Prob.*, Volume 6.3, pp. 177–192.

Port, S. C. and R. A. Vitale (1988). Positivity of stable densities. *Proc. Amer. Math. Soc. 102*(4), 1018–1023.

Powell, M. J. D. (1983). ZQPCVX - a fortran subroutine for convex quadratic programming. Technical report, Cambridge University, UK. DAMTP Report NA17.

Powell, M. J. D. (1985). On the quadratic programming algorithm of goldfarb and idnani. In R. W. Cottle, L. C. W. Dixon, B. Korte, M. J. Todd, E. L. Allgower, W. H. Cunningham, J. E. Dennis, B. C. Eaves, R. Fletcher, D. Goldfarb, J.-B. Hiriart-Urruty, M. Iri, R. G. Jeroslow, D. S. Johnson, C. Lemarechal, L. Lovasz, L. McLinden, M. J. D. Powell, W. R. Pulleyblank, A. H. G. Rinnooy Kan, K. Ritter, R. W. H. Sargent, D. F. Shanno, L. E. Trotter, H. Tuy, R. J. B. Wets, E. M. L. Beale, G. B. Dantzig, L. V. Kantorovich, T. C. Koopmans, A. W. Tucker, P. Wolfe, and R. W. Cottle (Eds.), *Mathematical Programming Essays in Honor of George B. Dantzig Part II*, Volume 25 of *Mathematical Programming Studies*, pp. 46–61. Springer Berlin Heidelberg.

Powell, M. J. D. (1989). TOLMIN: A Fortran package for linearly constrained optimization calculations. Tech. Report 1989/NA02, Cambridge University, Numerical Analysis Group.

Powell, M. J. D. (2004). The NEWUOA software for unconstrained optimization without derivatives. Tech. Report 2004/NA08, Cambridge University, Numerical Analysis Group. Online at www.damtp.cam.ac.uk.

Praetz, P. (1972). The distribution of share price changes. *Journal of Business 45*, 49–55.

Prange, D. and W. Scherer (2006). Correlation smile matching with alpha-stable distributions and fitted archimedan copula models. Dresnder Kleinwort Wasserstein, Preprint `http://www.defaultrisk.com/pp_corr_46.htm`.

Press, S. J. (1972a). *Applied Multivariate Analysis*. New York: Holt, Rinehart and Winston.

Press, S. J. (1972b). Estimation in univariate and multivariate stable distributions. *JASA 67*, 842–846.

Press, S. J. (1972c). Multivariate stable distributions. *Journal of Multivariate Analysis 2*, 444–462.

Press, S. J. (1982). *Applied multivariate analysis: using Bayesian and frequentist methods of inference*. Huntington, New York: Krieger Pub. Co.

Press, W. H., S. A. Teukolsky, W. T. Vetterling, and B. P. Flannery (1992a). *Numerical recipes in C* (Second ed.). Cambridge: Cambridge University Press. The art of scientific computing.

Press, W. H., S. A. Teukolsky, W. T. Vetterling, and B. P. Flannery (1992b). *Numerical recipes in FORTRAN* (Second ed.). Cambridge: Cambridge University Press. The art of scientific computing, With a separately available computer disk.

Preve, D. (2015). Linear programming-based estimators in nonnegative autoregression. *Journal of Banking and Finance 61, Supplement 2*, S225 – S234. Recent Developments in Financial Econometrics and Applications.

Priestley, M. B. (1981). *Spectral Analysis and Time Series*, Volume I and II. New York: Academic Press.

Profeta, C. and T. Simon (2016). *On the harmonic measure of stable processes*, pp. 325–345. Cham: Springer International Publishing.

Prokhorov, Y. (1959). An extremal problem in probability theory. *Theory of Probability and Its Applications 4*, 201–204.

Prudnikov, A. P., Y. A. Brychkov, and O. I. Marichev (1990). *Integrals and Series*, Volume 3. New York: Gordon and Breach Science Publishers. Translation from the original 1986 Russian edition.

Qeadan, F., T. J. Kozubowski, and A. K. Panorska (2012). The joint distribution of the sum and the maximum of IID exponential random variables. *Comm. Statist. Theory Methods 41*(3), 544–569.

Qi, Y. C. and P. Cheng (1996). A law of the iterated logarithm for partial sums in the field of attraction of a stable law. *Chinese Ann. Math. Ser. A 17*(2), 195–206.

Qimat, J., T. Liu, T. Qiu, F. Jin, S. Wilcox, and S. Luan (2019). Phased fractional lower-order cyclic moment processed in compressive signal processing. *IEEE Access 7*, 98811–98819.

Qin, J. and J. Lawless (1994). Empirical likelihood and general estimating equations. *Ann. Statist. 22*(1), 300–325.

Qin, J. and J. Lawless (1995). Estimating equations, empirical likelihood and constraints on parameters. *Canad. J. Statist. 23*(2), 145–159.

Qiou, Z. and N. Ravishanker (1998). Bayesian inference for time series with stable innovations. *J. Times Series Analysis 19*, 235–249.

Qiou, Z., N. Ravishanker, and D. Dey (1999). Multivariate survival analysis with positive stable frailties. *Biometrics 55*(2), 637–644.

Rabbachin, A., T. Quek, H. Shin, and M. Z. Win (2011). Cognitive network interference. *IEEE Journal On Selected Areas In Communications 29*(2), 480–493.

Rachev, S. and G. Samorodnitsky (1993). Option pricing formulae for speculative prices modelled by subordinated stochastic processes. *Serdica 19*, 175–190.

Rachev, S. and G. Samorodnitsky (1994). Geometric stable distributions in banach spaces. *J. Theoretical Probability 7*, 351–374.

Rachev, S. and G. Samorodnitsky (1995). Limit laws for a stochastic process and random recursion arising in probabilistic modelling. *Advances in Applied Probability 27*, 185–202.

Rachev, S. J., J. R. Kim, and S. Mittnik (1997). Econometric modelling in the presence of heavy-tailed innovations. *Comm. in Stat.- Stochastic Models 13*, 841–886.

Rachev, S. T. (1991). *Probability metrics and the stability of stochastic models*. New York: Wiley.

Rachev, S. T. (2003). *Handbook of Heavy Tailed Distributions in Finance*. Amsterdam: Elsevier.

Rachev, S. T. (2004). *Handbook of Computational and Numerical Methods in Finance*. Boston: Birkhäuser.

Rachev, S. T., F. J. Fabozzi, and C. Menn (2005). *Fat-Tailed and Skewed Asset Return Distributions : Implications for Risk Management, Portfolio Selection, and Option Pricing*. New York: Wiley.

Rachev, S. T. and S. Han (2000). Portfolio management with stable distributions. *Mathematical Methods of Operations Reasearch 51*, 341–352.

Rachev, S. T. and S. Mittnik (2000). *Stable Paretian Models in Finance*. New York, NY: Wiley.

Rachev, S. T. and G. Samorodnitsky (2001). Long strange segments in a long-range-dependent moving average. *Stochastic Process. Appl. 93*(1), 119–148.

Rachev, S. T., E. Schwartz, and I. Khindanova (2003). *Handbook of Heavy Tailed Distributions in Finance*, Chapter Stable modeling of market and credit value at risk, pp. 249–328. Elsevier/North-Holland.

Rachev, S. T. and A. SenGupta (1991). Geometric stable distributions and laplace-weibull mixtures. *Statistics and Decisions 10*, 251–271.

Rachev, S. T. and A. SenGupta (1993). Laplace-weibull mixtures for modeling price changes. *Management Sciences 39*, 1029–1038.

Rachev, S. T. and H. Xin (1993). Test for association of random variables in the domain of attraction of multivariate stable law. *Probab. Math. Statist. 14*(1), 125–141.

Raichlen, D. A., B. M. Wood, A. D. Gordon, A. Z. P. Mabulla, F. W. Marlowe, and H. Pontzer (2013). Evidence of Lévy walk foraging patterns in human hunter-gatherers. *PNAS*. 1318616111v1-201318616.

Raina, R. and C. Koul (1979, 02). On weyl fractional calculus. *Proceedings of the American Mathematical Society 73*, 188–192.

Raj, A., M. Barsbey, M. Gürbüzbalaban, L. Zhu, and U. Şimşekli (2022, June). Algorithmic stability of heavy-tailed stochastic gradient descent on least squares. *arXiv e-prints*, arXiv:2206.01274. arXiv.

Rajagopal, A., K. Ngai, R. Rendell, and S. Teitler (1983). Nonexponential decay in relaxation phenomena. *J. Stat. Phys. 30*, 285–292.

Rajput, B., D. Louie, and A. Tortrat (1981). Une loi zéro-un pour une class de mesures sur les groupes. *Ann. Inst. Henri Poincaré 17*, 331–335.

Rajput, B., K. Rama-Murthy, and T. Zak (1994). Supports of semistable probability measures on locally convex spaces. *Journal of Theoretical Probability 7*, 931–942.

Rajput, B. and A. Tortrat (1980). Un théorème de probabilité zéro ou un dans un groupe mesurable ou topologique quelconque. *C. R. Acad. Sci. Paris Sér. A-B 290*(5), A251–A254.

Rajput, B. S. (1972a). Gaussian measures on L_p spaces, $1 \leq p < \infty$. *J. Multivariate Anal. 2*, 382–403.

Rajput, B. S. (1972b). On abstract Wiener measure. *Nagoya Math. J. 46*, 155–160.

Rajput, B. S. (1972c). On Gaussian measures in certain locally convex spaces. *J. Multivariate Anal. 2*, 282–306.

Rajput, B. S. (1972d). The support of Gaussian measures on Banach spaces. *Teor. Verojatnost. i Primenen. 17*, 775–782.

Rajput, B. S. (1976). A representation of the characteristic function of a stable probability measure on certain TV spaces. *J. Multivariate Anal. 6*(4), 592–600.

Rajput, B. S. (1977a). On the support of certain symmetric stable probability measures on TVS. *Proc. Amer. Math. Soc. 63*(2), 306–312.

Rajput, B. S. (1977b). On the support of symmetric infinitely divisible and stable probability measures on LCTVS. *Proc. Amer. Math. Soc. 66*(2), 331–334.

Rajput, B. S. (1993). Supports of certain infinitely divisible probability measures on locally convex spaces. *Ann. Probab. 21*(2), 886–897.

Rajput, B. S. (1994). Correction: "Supports of certain infinitely divisible probability measures on locally convex spaces". *Ann. Probab. 22*(1), 525.

Rajput, B. S. (1997). An estimate of the semi-stable measure of small balls in Banach spaces. In *Stochastic processes and functional analysis (Riverside, CA, 1994)*, Volume 186 of *Lecture Notes in Pure and Appl. Math.*, pp. 171–178. Dekker, New York.

Rajput, B. S. (2010). The asymptotic dependence behavior of Ornstein-Uhlenbeck semi-stable processes. *Commun. Stoch. Anal. 4*(2), 239–251.

Rajput, B. S. and S. Cambanis (1972). Gaussian processes and Gaussian measures. *Ann. Math. Statist. 43*, 1944–1952.

Rajput, B. S. and D. Louie (1981). Une loi de zéro-un pour une classe de mesures sur les groupes. *Ann. Inst. H. Poincaré Sect. B (N.S.) 17*(4), 331–336.

Rajput, B. S. and K. Rama-Murthy (1984). Properties of semistable probability measures on $\mathbf{R}^m$. In *Probability theory on vector spaces, III (Lublin, 1983)*, Volume 1080 of *Lecture Notes in Math.*, pp. 214–232. Springer, Berlin.

Rajput, B. S. and K. Rama-Murthy (1987a). On sample path properties of semistable processes. *J. Multivariate Anal. 21*(2), 324–336.

Rajput, B. S. and K. Rama-Murthy (1987b). On the spectral representations of complex semistable and other infinitely divisible stochastic processes. *Stochastic Process. Appl. 26*(1), 141–159.

Rajput, B. S. and K. Rama-Murthy (1987c). Spectral representation of semistable processes, and semistable laws on Banach spaces. *J. Multivariate Anal. 21*(1), 139–157.

Rajput, B. S. and K. Rama-Murthy (2004). Comparison of tail probabilities of strictly semistable/stable random vectors and their symmetrized counterparts with application. *Probab. Math. Statist. 24*(2, Acta Univ. Wratislav. No. 2732), 367–379.

Rajput, B. S. and K. Rama-Murthy (2007). Uniform comparison of tails of (non-symmetric) probability measures and their symmetrized counterparts with applications. *J. Theoret. Probab. 20*(1), 87–105.

Rajput, B. S., K. Rama-Murthy, and X. R. Retnam (1998). Moment comparison of multilinear forms in stable and semistable random variables with application to semistable multiple integrals. In *Stochastic processes and related topics*, Trends Math., pp. 339–355. Birkhäuser Boston, Boston, MA.

Rajput, B. S., K. Rama-Murthy, and C. Sundberg (1991). An extremal problem in $\mathbf{H}^p$ of the upper half plane with application to prediction of stochastic processes. In *Stable processes and related topics (Ithaca, NY, 1990)*, Volume 25 of *Progr. Probab.*, pp. 199–252. Birkhäuser Boston, Boston, MA.

Rajput, B. S., K. Rama-Murthy, and T. Żak (1994). Supports of semi-stable probability measures on locally convex spaces. *J. Theoret. Probab. 7*(4), 931–942.

Rajput, B. S. and J. Rosiński (1989). Spectral representations of infinitely divisible processes. *Probab. Theory Related Fields 82*(3), 451–487.

Rajput, B. S. and J. Rosiński (1990). Complements on decoupling inequalities for multilinear functions in stable random vectors. *Probab. Math. Statist. 11*(1), 1–17.

Rajput, B. S. and C. Sundberg (1994). On some extremal problems in H^p and the prediction of L^p-harmonizable stochastic processes. *Probab. Theory Related Fields 99*(2), 197–210.

Rajput, B. S. and N. N. Vakhania (1977). On the support of Gaussian probability measures on locally convex topological vector spaces. pp. 297–309.

Ramachandran, B. (1969). On characteristic functions and moments. *Sankhya 31*(Series A), 1–12.

Ramachandran, B. and K.-S. Lau (1991). *Functional equations in probability theory*. Probability and Mathematical Statistics. Academic Press, Inc., Boston, MA.

Ramachandran, B. and C. Rao (1968). Some results on characteristic functions and characterizations of the normal and generalized stable laws. *Sankhya 30*(Series A), 125–140.

Ramanathan, J. and O. Zeitouni (1991). On the wavelet transform of fractional Brownian motion. *IEEE Trans. on Info. Theory IT-37*(4), 1156–1158.

Ramaswami, V., K. Balasubramanian, and B. Ramachandran (1980). Addendum and corrigendum: "The stable laws revisited" [Sankhyā Ser. A **38** (1976), no. 3, 300–303; MR **58** #31349]. *Sankhyā Ser. A 42*(3-4), 298–299.

Ramaswamy, V., K. Balasubramanian, and B. Ramachandran (1976). The stable laws revisited. *Sankhyā Ser. A 38*(3), 300–303.

Ramirez, A. B., G. R. Arce, and B. M. Sadler (2010, August). Fast algorithms for reconstruction of sparse signals from Cauchy random projections. Proceedings of the 18th European Signal Processing Conference. European Association for Signal and Image Processing.

Rao, C. R. (1965). *Linear Statistical Inference and its Applications*. New York: John Wiley.

Rao, C. R. and D. N. Shanbhag (1994). *Choquet-Deny type functional equations with applications to stochastic models*. Wiley Series in Probability and Mathematical Statistics: Probability and Mathematical Statistics. Chichester: John Wiley & Sons Ltd.

Rao, C. R., D. N. Shanbhag, T. Sapatinas, and M. B. Rao (2009). Some properties of extreme stable laws and related infinitely divisible random variables. *J. Statist. Plann. Inference 101*, 500–511.

Rao, M. M. and Z. D. Ren (1991). *Theory of Orlicz Spaces*. New York: Marcel Dekker.

Rathi, R., A. Sawant, L. Jain, and S. Kulkarni (2021, 01). *Driver Fatigue and Distraction Analysis Using Machine Learning Algorithms*, pp. 1037–1046.

Rathie, P., L. S. Ozelim, and C. Otiniano (2016). Exact distribution of the product and the quotient of two stable levy random variables. *Communications in Nonlinear Science and Numerical Simulation 36*, 204 – 218.

Rattihalli, R. N. and P. Y. Patil (2010). Generalized v-spherical densities. *Comm. Statist. Theory Methods 39*(19), 3568–3583.

Ravishanker, N. and D. Dey (2000). Multivariate survival models with a mixture of positive stable frailties. *Methodology and Computing in Applied Probability 2*(3), 293–308.

Razali, N. M. and Y. B. Wah (2011). Power comparisons of Shapiro-Wilk, Kolmogorov-Smirnov, Lilliefors and Anderson-Darling tests. *Journal of Statistical Modeling and Analytics 2*(1), 21–33.

Reed, M. and B. Simon (1972). *Methods of Modern Mathematical Physics. I: Functional Analysis*. New York: Academic Press.

Reiss, R.-D. and M. Thomas (2001). *Statistical Analysis of Extreme Values* (2 ed.). Basel: Birkhäuser.

Resnick, S. (1986). Point processes, regular variation and weak convergence. *Advances in Applied Probability 18*, 66–138.

Resnick, S. (1987). *Extreme Values, Regular Variation and Point Processes*. New York: Springer-Verlag.

Resnick, S. (1988). Association and multivariate extreme value distributions. In C. Heyde (Ed.), *Gani Festschrift: Studies in Statistical Modelling and Statistical Science*. Statistical Society of Australia.

Resnick, S. (1992). *Adventures in Stochastic Processes*. Birkhäuser, Boston.

Resnick, S. (1997a). Heavy tail modeling and teletraffic data. *Annals of Statistics 25*, 1805–1869.

Resnick, S. (1997b). Why non-linearities can ruin the heavy tailed modeler's day. In *A Practical Guide to Heavy Tails: Statistical Techniques for Analysing Heavy Tailed Distributions*, pp. 219–240. Birkhäuser, Boston.

Resnick, S. and E. V. D. Berg (1998). Sample correlation behavior for the heavy tailed general bilinear processes. Preprint. Available as TR1210.ps.Z at www.orie.cornell.edu/trlist/trlist.html.

Resnick, S. and P. Greenwood (1979). A bivariate stable characterization and domains of attraction. *J. Multivariate Anal. 9*(2), 206–221.

Resnick, S. and G. Samorodnitsky (1997a). Activity periods of an infinite server queue and performance of certain heavy tailed fluid queues. Preprint. Available as inf-server.ps at www.orie.cornell.edu/ gennady/techreports.

Resnick, S. and G. Samorodnitsky (1997b). Performance decay in a single server exponential queueing model with long range dependence. *Operations Research 45*, 235–243.

Resnick, S. and G. Samorodnitsky (2001). Steady-state distribution of the buffer content for $M/G/\infty$ input fluid queues. *Bernoulli 7*(2), 191–210.

Resnick, S. and G. Samorodnitsky (2004). Point processes associated with stationary stable processes. *Stochastic Process. Appl. 114*(2), 191–209.

Resnick, S. and G. Samorodnitsky (2015). Tauberian theory for multivariate regularly varying distributions with application to preferential attachment networks. *Extremes 18*(3), 349–367.

Resnick, S., G. Samorodnitsky, and F. Xue (1999). How misleading can sample acf's of stable ma's be? (very!). *Annals of Applied Probability 9*, 797–817.

Resnick, S., G. Samorodnitsky, and F. Xue (2000a). Growth rates of sample covariances of stationary symmetric α-stable processes associated with null recurrent markov chains. *Stochastic Processes and Their Applications 85*, 321–339.

Resnick, S., G. Samorodnitsky, and F. Xue (2000b). Growth rates of sample covariances of stationary symmetric α-stable processes associated with null recurrent Markov chains. *Stochastic Process. Appl. 85*(2), 321–339.

Resnick, S. and C. Stărică (1995). Consistency of Hill's estimator for dependent data. *Journal of Applied Probability 32*, 139–167.

Resnick, S. I. (2007). *Heavy-tail phenomena*. Springer Series in Operations Research and Financial Engineering. New York: Springer. Probabilistic and statistical modeling.

Resnick, S. I. and C. Stărică (1997). Smoothing the Hill estimator. *Adv. in Appl. Prob. 29*, 271–293.

Reuss, A., P. Olivares, L. Seco, and R. Zagst (2016). Risk management and portfolio selection using α-stable regime switching models. *Applied Mathematical Sciences 10*, 549 – 582.

Reybod, A., J. Etminan, and A. Mohammadpour (2019). A Pitman measure of similarity in k-means for clustering heavy-tailed data. *Communications in Statistics - Simulation and Computation 48*(6), 1595–1605.

Reybod, A., J. Etminan, R. Moineddin, and A. Mohammadpour (2020). The generalized Pitman measure of similarity and hierarchical clustering. *Communications in Statistics - Simulation and Computation 0*(0), 1–12.

Reynolds, A. M. and M. A. Frye (2007, 04). Free-flight odor tracking in Drosophila is consistent with an optimal intermittent scale-free search. *PLOS ONE 2*(4), 1–9.

Riabiz, M., T. Ardeshiri, and S. Godsill (2017a, 09 Dec). A central limit theorem with application to inference in α-stable regression models. In *Proceedings of the Time Series Workshop at NIPS 2016*, Volume 55 of *Proceedings of Machine Learning Research*, Barcelona, Spain, pp. 70–82. PMLR.

Riabiz, M., T. Ardeshiri, and S. Godsill (2017b, Aug). Convergence results for tractable inference in α-stable stochastic processes. In *2017 22nd International Conference on Digital Signal Processing (DSP)*, pp. 1–5.

Riabiz, M., T. Ardeshiri, I. Kontoyiannis, and S. J. Godsill (2017, December). Simulated convergence rates with application to an intractable α-stable inference problem. In *2017 IEEE 7th International Workshop on Computational Advances in Multi-Sensor Adaptive Processing (CAMSAP) (IEEE CAMSAP 2017)*, Curaçao, Netherlands Antilles.

Riabiz, M., T. Ardeshiri, I. Kontoyiannis, and S. J. Godsill (2018, June). Sharp Gaussian Approximation Bounds for Linear Systems with α-stable Noise. In *2018 IEEE International Symposium on Information Theory Proceedings*.

Riabiz, M. and S. J. Godsill (2017, March). Approximate simulation of linear continuous time models driven by asymmetric stable Lévy processes. In *Acoustics, Speech and Signal Processing (ICASSP), 2017 IEEE International Conference on*.

Riabiz, M., F. Lindsten, and S. Godsill (2015). Pseudo-Marginal MCMC for Parameter Estimation in α-Stable Distributions. *IFAC-PapersOnLine 48*(28), 472 – 477. 17th IFAC Symposium on System Identification SYSID 2015.

Rice, S. (1939). The distribution of the maxima of a random curve. *Amer. J. Math. 61*, 409–416.

Rice, S. (1944). Mathematical analysis of random noise. *Bell Syst. Tech. J. 23*, 282–332.

Rice, S. (1945). Mathematical analysis of random noise. *Bell System Tech. J. 24*, 46–156.

Richardson, R., A. Kottas, and B. Sansó (2020). Spatiotemporal modelling using integro-difference equations with bivariate stable kernels. *Journal of the Royal Statistical Society: Series B (Statistical Methodology) 82*(5), 1371–1392.

Richter, W. D. (2019). On $(p_1, ..., p_k)$-spherical distributions. *J Stat Distrib App 6*(9). https://doi.org/10.1186/s40488-019-0097-z.

Riesz, M. (1938a). Intégrales de Riemann-Liouville et potentiels. *Acta Sci. Math. Szeged. 9*, 1–42.

Riesz, M. (1938b). Rectification au travail "intégrales de Riemann-Liouville et potentiels". *Acta Sci. Math. Szeged. 9*, 116–118.

Riesz, M. (1949). L'intégrale de Riemann-Liouville et le problème de Cauchy. *Acta Mathematica 81*, 1–223.

Rimmer, R. (2014, April). Notes on stable order statistics. Private correspondence.

Rio, E. (1992). Covariance inequalities for strongly mixing processes. Preprint.

Rioul, O. and P. Flandrin (1992). Time-scale energy distributions-A general class extending wavelet transforms. *IEEE Trans. on Signal Proc. SP-40*(7), 1746–1757.

Rishmawi, S. (2005). *Fitting concentration data with stable distributions*. Ph. D. thesis, American University, Washington, DC.

Rizzo, M. L. and G. J. Székely (2016). Energy distance. *Wiley Interdisciplinary Reviews: Computational Statistics 8*(1), 27–38.

Robbins, H. (1948). On the asymptotic distribution of the sum of a random number of random variables. *Proceedings of the National Academy of Sciences of the USA 34*(4), pp. 162–163.

Robertson, A. and W. Robertson (1973). *Topological Vector Spaces*. Cambridge University Press.

Robinson, G. (2003a, March). High precision computation of density and tail areas for stable distributions. Technical report, CSIRO, Mathematical and Information Sciences.

Robinson, G. (2003b, March). Rapid computations concerning log maximally-skewd stable distributions. Technical report, CSIRO, Mathematical and Information Sciences.

Robinson, G. (2003c, March). Use of log maximally skew stable distributiosn for pricing and evaluating portfolio risk. Technical report, CSIRO, Mathematical and Information Sciences.

Robinson, P. (1990). Time series with strong dependence. Invited paper, 6th World Congress of the Econometric Society, Barcelona.

Robinson, P. (1991a). Nonparametric function estimation for long memory time series. In W. Barnett, J. Powell, and G. Tauchen (Eds.), *Nonparametric and Semiparametric Methods in Econometrics and Statistics: Proceedings of the Fifth International Symposium in Economic Theory and Econometrics*, pp. 437–457. Cambridge University Press.

Robinson, P. (1991b). Semiparametric analysis of long-memory time series. Preprint.

Robinson, P. (1992a). Log-periodogram regression of time series with long range dependence. Preprint.

Robinson, P. (1992b). Rates of convergence and optimal bandwidth in spectral analysis of processes with long range dependence. Preprint.

Robust Analysis Inc (2009a). *Programmer Manual for STABLE 5.1*. Proprietary material, contact www.RobustAnalysis.com.

Robust Analysis Inc (2009b). *User Manual for STABLE 5.1*. Software and user manual available online at www.RobustAnalysis.com.

Rodriguez Aguilar, R. (2020, 05). A hybrid model to simulate test cases of electrical power systems. *Applied Sciences 10*.

Rodriguez-Aguilar, R. and J. Marmolejo-Saucedo (2019). Structural dynamics and disruption events in supply chains using fat tail distributions. *IFAC-PapersOnLine 52*(13), 2686 – 2691. 9th IFAC Conference on Manufacturing Modelling, Management and Control MIM 2019.

Rodriguez-Aguilar, R., J. A. Marmolejo-Saucedo, and B. Retana-Blanco (2019). Prices of mexican wholesale electricity market: An application of alpha-stable regression. *Sustainability 11*, 1–14. doi:10.3390/su11113185.

Roll, R. (1970). *The Behavior of Interest Rates; The Application of the Efficient Market Hypothesis to U. S. Treasury Bills*. New York, New York: Basic Books.

Roop, J. P. (2006). Computational aspects of FEM approximation of fractional advection dispersion equations on bounded domains in $\mathbb{R}^2$. *J. Comput. Appl. Math. 193*(1), 243–268.

Rootzén, H. (1978). Extremes of moving averages of stable processes. *Ann. Probab. 6*(5), 847–869.

Ros-Oton, X. and J. Serra (2014). The dirichlet problem for the fractional laplacian: Regularity up to the boundary. *Journal de Mathématiques Pures et Appliquées 101*(3), 275–302.

Rosato, A., K. J. Strandburg, F. Prinz, and R. H. Swendsen (1987, Mar). Why the Brazil nuts are on top: Size segregation of particulate matter by shaking. *Phys. Rev. Lett. 58*, 1038–1040.

Rosenbaum, P. R. (2005). An exact distribution-free test comparing two multivariate distributions based on adjacency. *J. R. Statist. Soc. B 67*(4), 515–530.

Rosenblatt, M. (1961). Independence and dependence. In *Proc. of 4th Berkeley Sympos. on Math. Statist. and Probab.*, pp. 411–443. Berkeley: Univ. Calif. Press.

Rosenblatt, M. (1962). *Random Processes*. Chapman and Hall, New York.

Rosenblatt, M. (1976). Fractional integrals of stationary processes and the central limit theorem. *J. Appl. Probability 13*, 723–732.

Rosenblatt, M. (1979). Some limit theorems for partial sums of quadratic forms in stationary Gaussian variables. *Zeitschrift für Wahrscheinlichkeitstheorie und verwandte Gebiete 49*, 125–132.

Rosenblatt, M. (1981). Limit theorems for Fourier transforms of functionals of Gaussian sequences. *Zeitschrift für Wahrscheinlichkeitstheorie und verwandte Gebiete 55*, 123–132.

Rosenblatt, M. (1983). Stochastic processes with short-range and long-range dependence. Preprint.

Rosenblatt, M. (1987a). Remarks on limit theorems for nonlinear functionals of Gaussian sequences. *Probab. Th. Rel. Fields 75*, 1–10.

Rosenblatt, M. (1987b). Scale renormalization and random solutions of the Burgers equation. *Journal of Applied Probability 24*, 332–338.

Rosiński, J. and W. Woyczynski (1985). Moment inequalities for real and vector-valued p-stable stochastic integrals. In A. B. et al. (Ed.), *Probability Theory in Banach Spaces V*, pp. 369–387. Springer Verlag. Lecture Notes in Mathematics. Vol. 1153.

Rosiński, J. (1984). Random integrals on Banach space valued functions. *Studia Mathematica 78*, 15–38.

Rosiński, J. (1986). On stochastic integral representation of stable processes with sample paths in Banach spaces. *Journal of Multivariate Analysis 20*, 277–302.

Rosiński, J. (1989). On path properties of certain infinitely divisible processes. *Stoch. Proc. Appl. 33*, 73–87.

Rosiński, J. (1990a). An application of series representations to zero-one laws for infinitely divisible random vectors. In J. K. E. Eberlein and M. Marcus (Eds.), *Probability in Banach Spaces 7*, Boston. Birkhäuser.

Rosiński, J. (1990b). On series representation of infinitely divisible random vectors. *The Annals of Probability 18*, 405–430.

Rosiński, J. (1991). On a class of infinitely divisible processes represented as mixtures of Gaussian processes. In S. Cambanis, G. Samorodnitsky, and M. Taqqu (Eds.), *Stable Processes and Related Topics*, Boston, pp. 27–41. Birkhäuser.

Rosiński, J. (1992). On series representations of infinitely divisible random vectors. *Ann. Prob. 18*, 405–430.

Rosiński, J. (1995). On the structure of stationary stable processes. *The Annals of Probability 23*, 1163–1187.

Rosiński, J. (1997). Structure of stationary stable processes. In R. Adler, R. Feldman, and M. Taqqu (Eds.), *A Practical Guide to Heavy Tails: Statistical Techniques for Analysing Heavy Tailed Distributions*, pp. 461–472. Birkhäuser, Boston.

Rosiński, J. (2007). Tempering stable processes. *Stochastic Process. Appl. 117*(6), 677–707.

Rosinski, J. (2018, 09). Representations and isomorphism identities for infinitely divisible processes. *The Annals of Probability 46*, 3229–3274.

Rosiński, J. and G. Samorodnitsky (1993). Distributions of subadditive functionals of sample paths of infinitely divisible processes. *Annals of Probability 21*, 996–1014.

Rosiński, J. and G. Samorodnitsky (1994). Zero-one laws for multiple stochastic integrals. In C. Houdré and V. Pérez-Abreu (Eds.), *Chaos Expansions, Multiple Wiener-Itô Integrals and Their Applications*, pp. 233–259. CRC Press.

Rosiński, J. and G. Samorodnitsky (1996). Classes of mixing stable processes. *Bernoulli 2*, 3655–378.

Rosiński, J. and G. Samorodnitsky (1999). Product formula, tails and independence of multiple stable integrals. In *Advances in stochastic inequalities (Atlanta, GA, 1997)*, Volume 234 of *Contemp. Math.*, pp. 169–194. Providence, RI: Amer. Math. Soc.

Rosiński, J., G. Samorodnitsky, and M. Taqqu (1991). Sample path properties of stochastic processes represented as multiple stable integrals. *Journal of Multivariate Analysis 37*, 115–134.

Rosiński, J., G. Samorodnitsky, and M. Taqqu (1993). Zero-one laws for multilinear forms in Gaussian and other infinitely divisible random variables. *Journal of Multivariate Analysis 46*, 61–82.

Rosiński, J. and W. Woyczynski (1984). Products of random measures, multilinear random forms and multiple stochastic integrals. In *Proc. Measure Theory Conf. Oberwolfach 1983*. Springer's Lecture Notes in Math.

Rosiński, J. and W. Woyczyński (1986). On Itô stochastic integration with respect to p-stable motion: inner clock, integrability of sample paths, double and multiple integrals. *The Annals of Probability 14*, 271–286.

Rosiński, J. and W. Woyczynski (1987a). Multilinear forms in Pareto-like random variables and product random measures. *Colloquium Mathematicum 51*, 303–313.

Rosiński, J. and W. Woyczynski (1987b). On Ito stochastic integration with respect to p-stable motion: inner clock, integrability of sample paths, double and multiple integrals. *Ann. Prob. 14*, 271–286.

Rosiński, J. and T. Zak (1996). Simple conditions for mixing of infinitely divisible processes. *Stochastic Process. Appl. 61*(2), 277–288.

Rosiński, J. and T. Zak (1997). The equivalence of ergodicity of weak mixing for infinitely divisible processes. *J. Theoret. Probab. 10*(1), 73–86.

Ross, S. (1985). *Introduction to Probability Models* (3rd ed.). Orlando: Academic Press.

Rossberg, H.-J., B. Jesiak, and G. Siegel (1985). *Analytic Methods of Probability Theory*. Berlin: Akademie-Verlag.

Rotnitzky, A., D. R. Cox, M. Bottai, and J. Robins (2000). Likelihood-based inference with singular information matrix. *Bernoulli 6*(2), 243–284.

Roughan, M. and C. Kalmanek (2003). Pragmatic modeling of broadband access traffic. *Computer Communications 26*, 804–816.

Rousseeuw, P. and A. Leroy (1987). *Robust Regression and Outlier Detection*. NY: Wiley and Sons.

Rousseeuw, P. G. and G. W. Bassett (1990). The remedian: a robust averaging method for large data sets. *J. Amer. Statist. Assoc. 85*(409), 97–104.

Roy, E. (2010, January). Maharam extension and spectral representation of stable processes. Preprint: arXiv:1001.0638v2.

Royden, H. (1988). *Real Analysis* (Third ed.). Macmillan.

Rozanov, Y. (1967). *Stationary Random Processes*. San Francisco: Holden-Day.

Rubio, F. J. and A. M. Johansen (2013a). A simple approach to maximum intractable likelihood estimation. *Electronic Journal of Statistics 7*(none), 1632 – 1654.

Rubio, F. J. and A. M. Johansen (2013b). A simple approach to maximum intractable likelihood estimation. *Electronic Journal of Statistics 7*(none), 1632 – 1654.

Rupi, M., P. Tsakalides, E. D. Re, and C. L. Nikias (2000). Robust spatial filtering of coherent sources for wireless communications. *Signal Processing 80*(3), 381 – 396.

Rupi, M., P. Tsakalides, E. D. Re, and C. L. Nikias (2004). Constant modulus blind equalization based on fractional lower-order statistics. *Signal Processing 84*(5), 881 – 894.

Rushton, J. (2007). A functional LIL for d-dimensional stable processes; invariance for Lévy- and other weakly convergent processes. *J. Theoret. Probab. 20*(3), 397–427.

Rvačeva, E. L. (1962). On domains of attraction of multi-dimensional distributions. In *Select. Transl. Math. Statist. and Probability, Vol. 2*, pp. 183–205. Providence, R.I.: American Mathematical Society.

Ryu, B. and S. Lowen (1995). Modeling, analysis and simulation of self–similar traffic using the fractal–shot–noise–driven Poisson process. *Proceedings of IASTED International Conference on Modeling and Simulation*, Pittsburgh, PA.

Ryznar, M. (1986). Asymptotic behaviour of stable seminorms near the origin. *Ann. Probab. 14*, 287–298.

S. Mercan, M. S. A. (2011). Anomaly detection in hyperspectral imagery using stable distribution. *Proc.SPIE 8049*, 8049 – 8049 – 9.

Saad, F. A., C. E. Freer, M. C. Rinard, and V. K. Mansinghka (2020, March). The Fast Loaded Dice Roller: A Near-Optimal Exact Sampler for Discrete Probability Distributions. *arXiv e-prints*, arXiv:2003.03830.

Sabelfeld, K. and A. Kireeva (2022, 02). A global random walk on spheres algorithm for calculating the solution and its derivatives of the drift-diffusion-reaction equations. *Mathematical Methods in the Applied Sciences 45*.

Sabelfeld, K. K. (2019). Random walk on rectangles and parallelepipeds algorithm for solving transient anisotropic drift-diffusion-reaction problems. *Monte Carlo Methods and Applications 25*(2), 131–146.

Saenko, V. (2016). Estimation of the parameters of fractional-stable laws by the method of minimum distance. *Journal of Mathematical Sciences 214*(1), 101–114.

Saenko, V. (2020). The calculation of the density and distribution functions of strictly stable laws. *Mathematics 8*(5), 775.

Saenko, V. (2022, 10). The calculation of the probability density and distribution function of a strictly stable law in the vicinity of zero.

Saenko, V. (2023, March). The calculation of the probability density of a strictly stable law at large x.

Saenko, V. and Y. Saenko (2015). Application of the fractional stable distributions for approximation of gene expression profile. *Statistical Applications in Genetics and Molecular Biology 14*(3), 295–306.

Safar, J. L., C. A. Bollmann, M. Tummala, and J. C. McEachen (2020). A novel lévy-impulse mixture based connection model for computer network traffic. In *2020 14th International Conference on Signal Processing and Communication Systems (ICSPCS)*, pp. 1–6.

Sahimi, M. and S. E. Tajer (2005). Self-affine fractal distributions of the bulk density, elastic moduli, and seismic wave velocities of rock. *Phys Rev E 71*(4), Article Number: 046301.

Sahmoudi, M., K. Abed-Meraim, and M. Benidir (2004). *Blind separation of heavy-tailed signals using normalized statistics*, pp. 113–120. Independent Component Analysis and Blind Signal Separation, Lecture Notes in Computer Science 3195. Springer.

Sajti, S. (2023). Domain-domain correlation functions used in off-specular scattering. *Physica A: Statistical Mechanics and its Applications*, 128853.

Salas-Gonzalez, D., E. Kuruoglu, and D. Ruiz (2009a). Finite mixture of α-stable distributions. *Digital Signal Processing: A Review Journal 19*(2), 250–264. cited By 23.

Salas-Gonzalez, D., E. Kuruoglu, and D. Ruiz (2009b). A heavy-tailed empirical bayes method for replicated microarray data. *Computational Statistics and Data Analysis 53*(5), 1535–1546. cited By 6.

Salas-Gonzalez, D., E. Kuruoglu, and D. Ruiz (2009c). Modelling and assessing differential gene expression using the alpha stable distribution. *International Journal of Biostatistics 5*(1). cited By 2.

Salas-Gonzalez, D., E. Kuruoglu, and D. Ruiz (2010). Modelling with mixture of symmetric stable distributions using gibbs sampling. *Signal Processing 90*(3), 774–783. cited By 22.

Salas-Gonzalez, D., E. E. Kuruoglu, and D. P. Ruiz (2009d). Modelling and assessing differential gene expression using the alpha stable distribution. *International Journal of Biostatistics 5*(1).

Salhi, K., M. Deaconu, A. Lejay, N. Champagnat, and N. Navet (2015, 02). Regime switching model for financial data: Empirical risk analysis. *Physica A: Statistical Mechanics and its Applications 461*.

Samaratunga, S. and C. Potgieter (2017, 05). A split-sample approach for estimating the stability index of a stable distribution. *arXiv:1705.09840*.

Samarov, A. and M. Taqqu (1988). On the efficiency of the sample mean in long memory noise. *Journal of Time Series Analysis 9*, 191–200.

Samorodnitsky, G. (1988). Extrema of skewed stable processes. *Stoch. Proc. Appl. 30*, 17–39.

Samorodnitsky, G. (1991). Probability tails of Gaussian extrema. *Stoch. Proc. Appl. 38*, 55–84.

Samorodnitsky, G. (1993a). Integrability of stable processes. *Probab. Math. Stat.*. To appear.

Samorodnitsky, G. (1993b). Possible sample paths of α-stable self-similar processes. *Stat. Probab. Letters*. To appear.

Samorodnitsky, G. (1995a). Association of infinitely divisible random vectors. *Stochastic Processes and Their Applications 55*, 45–56.

Samorodnitsky, G. (1995b). A class of shot noise models for financial applications. In C. Heyde, Y. V. Prohorov, R. Pyke, and S. Rachev (Eds.), *Proceeding of Athens International Conference on Applied Probability and Time Series. Volume 1: Applied Probability*, pp. 332–353. Springer.

Samorodnitsky, G. (1998). Lower tails of self-similar stable processes. *Bernoulli 4*(1), 127–142.

Samorodnitsky, G. (2004a). Extreme value theory, ergodic theory and the boundary between short memory and long memory for stationary stable processes. *Ann. Probab. 32*(2), 1438–1468.

Samorodnitsky, G. (2004b). Maxima of continuous-time stationary stable processes. *Adv. in Appl. Probab. 36*(3), 805–823.

Samorodnitsky, G. (2005). Null flows, positive flows and the structure of stationary symmetric stable processes. *Ann. Probab. 33*(5), 1782–1803.

Samorodnitsky, G. (2006a). Long memory and self-similar processes. *Ann. Fac. Sci. Toulouse Math. (6) 15*(1), 107–123.

Samorodnitsky, G. (2006b). Long memory and self-similar processes. *Ann. Fac. Sci. Toulouse Math. (6) 15*(1), 107–123.

Samorodnitsky, G., S. T. Rachev, J.-R. Kurz-Kim, and S. Stoyanov (2007). Asymptotic distribution of unbiased linear estimators in the presence of heavy-tailed stochastic regressors and residuals. *Probability and Mathematical Statistics 27*(2), 275–302.

Samorodnitsky, G. and J. Szulga (1989). An asymptotic evaluation of the tail of a multiple symmetric α-stable integral. *The Annals of Probability 17*, 1503–1520.

Samorodnitsky, G. and M. Taqqu (1989). The various linear fractional Lévy motions. In K. A. T.W. Anderson and D. Iglehart (Eds.), *Probability, Statistics and Mathematics: Papers in Honor of Samuel Karlin*, Boston, pp. 261–270. Academic Press.

Samorodnitsky, G. and M. Taqqu (1990a). $(1/\alpha)$-self-similar processes with stationary increments. *Journal of Multivariate Analysis 35*, 308–313.

Samorodnitsky, G. and M. Taqqu (1990b). Existence of joint moments of stable random variables. *Stat. Probab. Letters 10*, 167–172.

Samorodnitsky, G. and M. Taqqu (1990c). Multiple stable integrals of Banach-valued functions. *Journal of Theoretical Probability 3*, 267–287.

Samorodnitsky, G. and M. Taqqu (1991a). Conditional moments and linear regression for stable random variables. *Stochastic Processes and their Applications 39*.

Samorodnitsky, G. and M. Taqqu (1991b). Construction of multiple stable measures and integrals using LePage representation. In S. Cambanis, G. Samorodnitsky, and M. Taqqu (Eds.), *Stable Processes and Related Topics*, Volume 25 of *Progress in Probability*, Boston, pp. 121–141. Birkhäuser.

Samorodnitsky, G. and M. Taqqu (1991c). Probability laws with 1-stable marginals are 1-stable. *The Annals of Probability 19*, 1777–1780.

Samorodnitsky, G. and M. Taqqu (1992). Linear models with long-range dependence and finite or infinite variance. In D. Brillinger, P. Caines, J. Geweke, E. Parzen, M. Rosenblatt, and M. Taqqu (Eds.), *New Directions in Time Series Analysis, Part II*, New York, pp. 325–340. IMA Volumes in Mathematics and its Applications, Volume 46: Springer-Verlag.

Samorodnitsky, G. and M. Taqqu (1993). Stochastic monotonicity and Slepian-type inequalities for infinitely divisible and stable random vectors. *The Annals of Probability 21*, 143–160.

Samorodnitsky, G. and M. Taqqu (1994a). Lévy measures of infinitely divisible random vectors and Slepian inequalities. *The Annals of Probability 22*, 1930–1956.

Samorodnitsky, G. and M. Taqqu (1994b). *Stable Non-Gaussian Random Processes*. New York: Chapman and Hall.

Samotij, K. and T. Zak (1989). A note on Marcus example of a nonstable law with all projections stable. *Bull. Polish Acad. Sci. Math. 37*(1-6), 199–202 (1990).

Sampaio, J. and P. Morettin (2015). Indirect estimation of randomized generalized autoregressive conditional heteroskedastic models. *Journal of Statistical Computation and Simulation 85*(13), 2702–2717.

Samuelson, P. (1965). Rational theory of warrant pricing. *Industrial Management Review 6*, 13–32.

Samuelson, P. (1967). Efficient portfolio selection for Pareto-Lévy investments. *J. Finance and Quantitative Analysis 2*, 107–117.

Samworth, R. J. and M. Yuan (2012, 12). Independent component analysis via nonparametric maximum likelihood estimation. *Ann. Statist. 40*(6), 2973–3002.

Sánchez, M., J. E. Trinidad, J. García, and M. Fernández (2015, 05). The effect of the underlying distribution in Hurst exponent estimation. *PLOS ONE 10*(5), 1–17.

Saniga, E. M. and J. C. Hayya (1977). Simple goodness-of-fit tests for symmetric stable distributions. *The Journal of Financial and Quantitative Analysis 12*(2), 276–289.

Santana, L., J. P. Nolan, and S. G. Meintanis (2015, June). Goodness–of–fit tests for univariate and multivariate stable–Paretian distributions: A comparison. preprint.

Sartini, L., G. Besio, and F. Cassola (2017). Spatio-temporal modelling of extreme wave heights in the mediterranean sea. *Ocean Modelling 117*, 52 – 69.

Sassi, R. (2009, Sept). Characterizing histograms of heartbeat interval differences with gaussian mixture densities. In *Computers in Cardiology, 2009*, pp. 157–160.

Sasvári, Z. (2013). *Multivariate characteristic and correlation functions*, Volume 50 of *De Gruyter Studies in Mathematics*. Walter de Gruyter & Co., Berlin.

Sathe, A. and N. Upadhye (2019, 11). Estimation of the parameters of symmetric stable ARMA and ARMA-GARCH models. *Preprint*.

Sathe, A. M. and N. S. Upadhye (2019, Feb). Estimation of the parameters of multivariate stable distributions. *arXiv e-prints*, arXiv:1902.09796.

Sathe, A. M., N. S. Upadhye, and A. Wyłomańska (2023). Forecasting of symmetric α-stable autoregressive models by time series approach supported by artificial neural networks. *Journal of Computational and Applied Mathematics 425*, 115051.

Sato, K. (1999). *Lévy Processes and Infinitely Divisible Distributions*. Cambridge University Press.

Sato, K. and M. Yamazato (1978). On distribution functions of class *L*. *Z. Wahr. verw. Gebiete 43*, 273–308.

Sato, Y. (1989). Joint distributions of some self-similar stable processes. Preprint. Revised as "Structure of Bivariate Distributions of Linear Fractional Stable and Chentsov type stable processes".

Sato, Y. (1990). Structure of Lévy measures of stable random fields of Chentsov type. Preprint.

Sato, Y. (1991). Distributions of stable random fields of Chentsov type. *Nagoya Math. J. 123*, 119–139.

Sato, Y. (1992a). Structure of bivariate distributions of linear fractional and Chentsov type stable processes. In A. Shiryaev, V. Korolyuk, S. Watanabe, and M. Fukushima (Eds.), *Probability Theory and Mathematical Statistics*, Singapore, pp. 306–316. Proceedings of the Sixth USSR-Japan Symposium: World Scientific.

Sato, Y. (1992b). Structure of Lévy measures of stable random fields of Chentsov type. *Probability and Mathematical Statistics 13*, 165–176.

Sato, Y. and S. Takenaka (1991). On determinism of symmetric α-stable processes of generalized Chentsov type. In K. Itô and T. Hida (Eds.), *Gaussian Random Fields*, pp. 332–345. Singapore: World Scientific. Series on Probability and Statistics, Vol.1.

Scalas, E. and K. Kim (2006). The art of fitting financial time series with Lévy stable distributions. *Korean Physical Society 50*, 105–111. https://doi.org/10.3938/jkps.50.105.

Schaback, R. and Z. Wu (1996). Operators on radial functions. *Journal of Computational and Applied Mathematics 73*(1), 257 – 270.

Scheffler, H.-P., A. Schnurr, and D. Schulte (2020, 09). Operator-stable-like processes. 10.13140/RG.2.2.36569.34406.

Scheffler, P., A. Schnurr, and D. Schulte (2024). Operator-stable-like processes. arXiv 2011.00783.

Scher, H., M. F. Schlesinger, and J. T. Bendler (1991). Time-scale invariance in transport and relaxation. *Phys. Today 44*, 26–34.

Scherer, W. and D. Prange (2009). Correlation smile matching for cdo tranches with α-stable distributions and fitted archimedan copulas. *Quantitative Finance 9*(4), 439–449.

Schertzer, D., M. Larcheveque, J. Duan, and S. Lovejoy (1999). Generalized stable multivariate distribution and anisotropic dilations.

Schiffer, M. and G. Szegö (1949). Virtual mass and polarization. *Trans. Amer. Math. Soc. 67*, 130–205.

Schilder, M. (1970). Some structure theorems for the symmetric stable laws. *Ann. Math. Stat. 41*, 412–421.

Schinckus, C. (2013). How physicists made stable Lévy processes physically plausible. *Brazilian Journal of Physics 43*, 281–293.

Schlather, M. (2002). Models for stationary max-stable random fields. *Extremes 5*(1), 33–44.

Schlesinger, M. and B.D.Hughes (1981). Analogs of renormalization group transformations in random processes. *Physica 190*(A), 597–608.

Schlesinger, M. F., G. M. Zaslavsky, and U. Frisch (1995). *Lévy flights and related topics in physics*. Lecture Notes in Physics, No. 450. Springer.

Schmidt, R. (2002). Tail dependence for elliptically contoured distributions. *Math. Methods Oper. Res. 55*(2), 301–327. Special issue on mathematical models in market and credit risk.

Schneider, L., A. Krajina, and T. Krivobokova (2021). Threshold selection in univariate extreme value analysis. *Extremes 24*, 881–913. https://doi.org/10.1007/s10687-021-00405-7.

Schneider, R. (1993). *Convex bodies: the Brunn-Minkowski theory*, Volume 44 of *Encyclopedia of Mathematics and Its Applications*. Cambridge, U.K.: Cambridge University Press.

Schneider, W. R. (1986). Stable distributions: Fox function representation and generalization. In S. Albeverio, G. Casati, and D. Merlini (Eds.), *Stochastic Processes in Classical and Quantum Systems*, pp. 497–511. Berlin: Springer.

Schoenberg, I. (1937). On certain metric spaces arising from Euclidean spaces by a change of metric and their imbedding in Hilbert space. *Annals of Mathematics 38*(4), 787–793.

Schönbucher, P. J. (2003). Taken to the limit: simple and not-so-simple loan loss distributions. *WILMOTT Magazine 2*, 63–73.

Schreiber, M. (1972). Quelques remarques sur les caractéristiques des espaces L^p, $0 \leq p < 1$. *Ann. Inst. Henri Poincaré 8*, 83–92.

Schucany, W. R. and D. M. Bankson (1989). Small sample variance estimator for U-statistics. *Austral. J. Statist. 31*(3), 417–426.

Schumaker, L. L. (1981). *Spline Functions: Basic Theory*. New York: Wiley.

Schwartz, L. (1981). Geometry and probability in Banach spaces. In *Lecture Notes in Mathematics*. New York: Springer Verlag.

Scott, D. W. (1979). On optimal and data-based histograms. *Biometrika 66*(3), 605–610.

Seber, G. A. F. and C. J. Wild (1989). *Nonlinear regression*. Wiley Series in Probability and Mathematical Statistics: Probability and Mathematical Statistics. New York: John Wiley & Sons Inc.

Seeley, R. T. (1966). Spherical harmonics. *The American Mathematical Monthly 73*(4), 115–121.

Segall, A. and T. Kailath (1976). Orthogonal functionals of independent-increment processes. *IEEE Trans. Information Theory IT*(22), 287–298.

Segers, J. (2017, July). personal e-mmail communication.

Segura, A. M., D. Calliara, H. Fort, and B. L. Lan (2013). Fat tails in marine microbial population fluctuations. *Oikos OIK-00493*, 1–7.

Self, S. G. and K.-Y. Liang (1987). Asymptotic properties of maximum likelihood estimators and likelihood ratio tests under nonstandard conditions. *J. Amer. Statist. Assoc. 82*(398), 605–610.

Sellán, S., N. Aigerman, and A. Jacobson (2021). Swept volumes via spacetime numerical continuation. *ACM Transactions on Graphics*.

SenGupta, A. (1996). Analysis of directional data in agricultural research using ddstap. In P. Narain and R. Pandey (Eds.), *Proceedings of the Golden Jubilee International Conference of the Indian Society of Agricultural Statistics*, pp. 43–59.

SenGupta, A. and C. Pal (2001). On optimal tests for isotropy against the symmetric wrapped stable - circular uniform mixture family. *Journal of Applied Statistics 28*, 129–143.

SenGupta, A. and M. Roy (2019, 11). An universal, simple, circular statistics-based estimator of α for symmetric stable family. *Journal of Risk and Financial Management 12*, 171.

SenGupta, A. and S. Roy (2001). On classification rules for the stable distribution. *Mathematical and Computer Modelling 34*, 1073–1093.

Serrano, R. and L. Mata (2019). Value at risk estimation in the Mexican stock exchange: A comparison or empirical distributions. *Journal of Applied Economic Sciences XIV*(1), 144–154.

Serttas, F. O. (2018). Infinite-variance error structure in finance and economics. *International Econometric Review 10*(1), 14 – 23.

Servin-Aguilar, J. G., L. Rizo-Dominguez, J. A. Pardiñas-Mir, C. Vargas-Rosales, and I. Padilla-Cantoya (2020). Epilepsy seizure detection: A heavy tail approach. *IEEE Access 8*, 208170–208178.

Shampine, L. (2008). Vectorized adaptive quadrature in MATLAB. *Journal of Computational and Applied Mathematics 211*(2), 131 – 140.

Shanbhag, D. N., D. Pestana, and M. Sreehari (1977). Some further results in infinite divisibility. *Math. Proc. Cambridge Philos. Soc. 82*(2), 289–295.

Shanbhag, D. N. and M. Sreehari (1977). On certain self-decomposable distributions. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete 38*(3), 217–222.

Shanbhag, D. N. and M. Sreehari (1979). An extension of Goldie's result and further results in infinite divisibility. *Z. Wahrsch. Verw. Gebiete 47*(1), 19–25.

Shao, Q. M. (1993). An invariance principle for stationary ρ-mixing sequences with infinite variance. *Chinese Ann. Math. Ser. B 14*(1), 27–42. A Chinese summary appears in Chinese Ann. Math. Ser. A **1**4 (1993), no. 1, 134.

Shao, Q.-M. and Q. Wang (2013). Self-normalized limit theorems: a survey. *Probab. Surv. 10*, 69–93.

Shardlow, T. (2019). A walk outside spheres for the fractional Laplacian: Fields and first eigenvalue. *Mathematics of Computation 88*, 2767–2792.

Sheng, H., Y. Chen, and T. Qiu (2012). *Fractional Processes and Fractional-Order Signal Processing Techniques and Applications*. Springer Verlag.

Shepp, L. (1966). Radon-Nikodym derivatives of Gaussian measures. *Ann. Math. Statist. 37*, 321–354.

Shepp, L. (1982). On the integral of the absolute value of a pinned Wiener process. *The Annals of Probability 10*, 234–239.

Shi, K., G. Dong, and Z. Guo (2020). Cauchy noise removal by nonlinear diffusion equations. *Computers & Mathematics with Applications 80*(9), 2090–2103.

Shieh, N.-R. (1991). Conditional local nondeterminism and Hausdorff measure of level sets. *Canad. Math. Bull. 34* (1), 123–127.

Shieh, N.-R. (1992). Local nondeterminism and self-intersections of certain self-similar stable processes. In *Probability theory and mathematical statistics (Kiev, 1991)*, pp. 317–323. World Sci. Publ., River Edge, NJ.

Shirvani, A. and A. R. Soltani (2013). A characterization for truncated Cauchy random variables with nonzero skewness parameter. *Computational Statistics 28*, 1011–1016.

Shiryayev, A. (1981). Martingales: recent developments, results and applications. *International Statistical Review 49*, 199–233.

Shkolnik, S. (1984). Asymptotic properties of a invariant ML-estimator of the characteristic index of stable laws. UzNIINTI 234 D, 1–12 (In Russian).

Shkol˜nik, S. M. (1993). Some properties of the median of the stable distributions close to the symmetric ones. In *Stability problems for stochastic models (Suzdal, 1991)*, Volume 1546 of *Lecture Notes in Math.*, pp. 170–173. Berlin: Springer.

Shlesinger, M. F. (2001). Physics in the noise. *Nature 411*, 641.

Shlesinger, M. F. and E. W. Montroll (1984). On the william-watts function of dielectric relaxation. *Proc. Natl. Acad. Sci. USA 81*, 1280–1283.

Shlezinger, N., N. Farsad, Y. C. Eldar, and A. J. Goldsmith (2019, May). ViterbiNet: A Deep Learning Based Viterbi Algorithm for Symbol Detection. *arXiv e-prints*, arXiv:1905.10750.

Shongwe, T., A. J. H. Vinck, and H. C. Ferreira (2015, September). A study on impulse noise and its models. DOI: 10.23919/SAIEE.2015.8531938.

Shyamalkumar, N. D. and S. Tao (2020). On tail dependence matrices. *Extremes 23*, 245–285. https://doi.org/10.1007/s10687-019-00366-y.

Si, Y. and S. Nadarajah (2022). A statistical analysis of chinese stock indices returns from approach of parametric distributions fitting. *Research Square*. https://doi.org/10.21203/rs.3.rs-1354559/v1.

Sibatov, R. and V. Uchaikin (2007). Fractional differential kinetics of charge transport in unordered semiconductors. *Semiconductors 41*, 335–340. https://doi.org/10.1134/S1063782607030177.

Šidák, Z. (1968). On multivariate normal probabilities of rectangles: their dependence on correlations. *Ann. Math. Stat. 39*, 1425–1434.

Siebert, E. (1987). Decomposition of convolution semigroups on Polish groups and zero-one laws. *Hokkaido Math. J. 16*, 235–255.

Sigman, K. (1999, Dec). Appendix: A primer on heavy-tailed distributions. *Queueing Systems 33*(1), 261–275.

Silverman, B. W. (1978). Distances on circles, toruses and spheres. *Journal of Applied Probability 15*(1), 136–143.

Silverstein, M. (1974). *Symmetric Markov Processe*. Number 426 in Lecture Notes in Mathematics. Berlin: Springer.

Simiu, E., N. A. Heckert, J. J. Filliben, and S. K. Johnson (2001). Extreme wind load estimates based on the gumbel distribution of dynamic pressures: an assessment. *Structural Safety 23*(3), 221 – 229.

Simmross-Wattenberg, F., J. I. Asensio-Perez, P. C. de-la Higuera, M. Martin-Fernandez, I. A. Dimitriadis, and C. Alberola-Lopez (2011). Anomaly detection in network traffic based on statistical inference and alpha-stable modeling. *IEEE Transactions on Dependable and Secure Computing 8*(4), 494–509.

Simmross-Wattenberg, F., M. Martín-Fernández, P. Casaseca-de-la Higuera, and C. Alberola-López (2015). Fast calculation of α-stable density functions based on off-line precomputations. application to ML parameter estimation. *Digital Signal Processing 38*, 1–12.

Simmross-Wattenberg, F., A. Tristn-Vega, P. C. de-la Higuera, J. Asensio-Prez, M. Martin-Fernndez, Y. Dimitriadis, and C. Alberola-Lopez (2008, September). Modelling network traffic as alpha-stable stochastic processes: An approach towards anomaly detection. *Proc. VII Jornadas de Ingeniera Telemtica (JITEL)*, 25–32.

Simon, T. (2011a). A multiplicative short proof for the unimodality of stable densities. *Electron. Commun. Probab. 16*, 623–629.

Simon, T. (2011b). Multiplicative strong unimodality for positive stable laws. *Proc. Amer. Math. Soc. 139*(7), 2587–2595.

Simon, T. (2012). On the unimodality of power transformations of positive stable densities. *Math. Nachr. 285*(4), 497–506.

Simon, T. (2014). Comparing Fréchet and positive stable laws. *Electron. J. Probab. 19*, no. 16, 25.

Simon, T. (2015). Positive stable densities and the bell-shape. *Proc. of the Amer. Math. Soc. 143*(2), 885–895.

Sims, D., E. Southall, N. Humphries, and et al. (2008). Scaling laws of marine predator search behaviour. *Nature 451*, 1098–1102. https://doi.org/10.1038/nature06518.

Sims, D. W., N. E. Humphries, N. Hu, V. Medan, and J. Berni (2019, nov). Optimal searching behaviour generated intrinsically by the central pattern generator for locomotion. *eLife 8*, e50316.

Sinai, Y. G. (1976). Self-similar probability distributions. *Theory Probability Appl. 21*, 64–80.

Sindirgi, P. (2021). On the unit root nonstationary behavior of daily self-potential (SP) time series with infinite variance noise: an example from Urla, Izmir-Turkey. *Earth Science Informatics*. https://doi.org/10.1007/s12145-021-00626-1.

Singpurwalla, N. (1995). Survival in dynamic environments. *Statistical Science 10*, 86–103.

Sinz, F. and M. Bethge (2010). L_p-nested symmetric distributions. *J. Mach. Learn. Res. 11*, 3409–3451.

Sivia, D. S. (1996). *Data analysis*. New York: The Clarendon Press Oxford University Press. A Bayesian tutorial.

Skorohod, V. (1957). Limit theorems for stochastic processes with independent increments. *Theor. Probab. Appl. 2*, 137–171.

Slámová, L. and L. B. Klebanova (2012). Modeling financial returns by discrete stable distributions. Department of Probability and Mathematical Statistics, Charles University, Prague, Czech Republic.

Slepian, D. (1962). The one-sided barrier problem for Gaussian noise. *Bell System Tech. J. 41*, 463–501.

Slepian, D. (1972). On the symmetrized Kronecker power of a matrix and extensions of Mehler's formula for Hermite polynomials. *SIAM J. Math. Analysis 3*, 606–616.

Slud, E. V. (1991). Multiple Wiener-Itô integral expansions for level-crossing-count functionals. *Probab. Th. Rel. Flds. 87*, 349–364.

Slud, E. V. (1992a). Multiple stochastic integral representation of the number of curve-crossings by a differentiable Gaussian process with applications. Preprint.

Slud, E. V. (1992b, July 1992). MWI expansions for functionals related to level-crossing counts. In *Proceedings of CIMAT Workshop on Multiple Wiener-Itô Integrals*, Guanajuato Mexico.

Smallman, L., W. Underwood, and A. Andreas (2020). SimplePoisson PCA: an algorithm for (sparse) feature extraction with simultaneous dimension determination. *Computational Statistics 35*(2), 559–577.

Smith, M., A. Min, C. Almeida, and C. Czado (2010). Modeling longitudinal data using a pair-copula construction decomposition of serial dependence. *Journal of the American Statistical Association 105*, 1467–1579.

Smith, R. L. (1985). Maximum likelihood estimation in a class of nonregular cases. *Biometrika 72*(1), 67–90.

Smith, R. L. (1987). Estimating tails of probability distributions. *Ann. Statist. 15*, 1174–1207.

Smith, T. and D. B. Weissman (2020). Isolation by distance in populations with long-range dispersal. *bioRxiv*.

Smith, T. B. and D. B. Weissman (2023). Isolation by distance in populations with power-law dispersal. *bioRxiv*.

Solo, V. (1987). Intrinsic random functions and the paradox of 1/f noise. Preprint.

Solo, V. (1989). Asymptotics of quadratic forms for time series. Preprint.

Solomon, T. H., E. R. Weeks, and H. L. Swinney (1994). Chaotic advection in a two-dimensional flow: Lévy flights and anomalous diffusion. *Physica D 76*(1-3), 70–84.

Soltani, A. R. (1992). Local nondeterminism for moving average stable processes. *Bull. Iranian Math. Soc. 18*(2), 7–15.

Soltani, A. R. and M. Dozzi (2001). Berman's integral for stable noise. In *Proceedings of the Seminar on Stability Problems for Stochastic Models, Part II (Nałęczow, 1999)*, Volume 106, pp. 2747–2751.

Soltani, A. R. and A. Shirvani (2010). Truncated stable random variables: characterization and simulation. *Computational Statistics 25*, 155–161.

Sorace, J. (2012, 13 November). Humans are not electrons: Characterization of the medicare disease probability distribution. Seminar, NIH.

Sornette, D. (2001). Fokker-Planck equation of distributions of financial returns and power laws. *Phys. A 290*(1-2), 211–217.

Sornette, D. (2003). *Why Stock Markets Crash: Critical Events in Complex Financial Systems*. Princeton University Press.

Sornette, D. (2004). *Critical Phenomena in Natural Sciences* (2nd ed.). Springer.

Sornette, D. and K. Ide (2001). The Kalman-Lévy filter. *Physica D 151*, 142–174.

Souryal, M. R., E. G. Larsson, B. M. Peric, and B. R. Vojcic (2005). Soft-decision metrics for coded orthogonal signaling in symmetric alpha-stable noise. In *ICASSP 2005*, pp. III 697–700.

Souryal, M. R., B. R. Vojcic, and R. L. Pickholtz (2003, October). Interference model for ad hoc DS/CDMA packet radio networks with variable coherent modulation. In *Proc. MILCOM*, pp. 1–6.

Sousa, T. R. (2013, Julho). *Modelos Combinados AR-GARCH governados por distribuições estáveis*. Phd thesis, Universidade de Brasília, Departamento de Estatística do Instituto de Ciências Exatas.

Sousa, T. R., C. E. G. Otiniano, and S. R. C. Lopes (2014). An R package for estimating ARMA models with GARCH/APARCH innovations following GEV and stable distributions. *Preprint*.

Sowell, F. (1987). Maximum-likelihood estimation of fractionally integrated time-series models. Research Paper 87-07, Institute of Statistics and Decision Sciences, Duke University, Dunham, NC.

Sowell, F. (1990). The fractional unit-root distribution. *Econometrica 58*, 495–505.

Spanos, A. (1993). On modeling speculative prices: Student's t autoregressive model with dynamic heteroskedasticity. Technical report, University of Cyprus.

Spitzer, F. (1964a). Electrostatic capacity, heat flow, and Brownian motion. *Z. Wahrscheinlichkeitstheorie verw Gebiete 3*, 110–121.

Spitzer, F. (1964b). *Principle of Random walk*. Princeton: D. van Nostrand Company.

Spitzer, F. (1969). Uniform motion with elastic collision of an infinite particle systems. *J. Math. Mech. 18*, 973–990.

Springer, M. (1979). *The Algebra of Random Variables*. John Wiley and Sons.

Spruill, M. C. (2007). Asymptotic distribution of coordinates on high dimensional spheres. *Elect. Comm. in Probab. 12*, 234–247.

Sreehari, M. (1970a). A limit theorem for the maximum of normalized partial sums. *Z. Wahrscheinlichkeitstheorie und Verw. Gebiete 16*, 22–28.

Sreehari, M. (1970b). On a class of limit distributions for normalized sums of independent random variables. *Teor. Verojatnost. i Primenen. 15*, 269–290.

Sreehari, M. (1970c). On a class of limit distributions for normalized sums of independent random variables. *Theory Probab. and Appl. 15*, 258–281. English translation.

Sreehari, M. (1973). A note on the attraction of a composition to a stable law. *Journal of the Maharaja Sayajirao University of Baroda 22*, 43–47.

Sreehari, M. (1994). *Statistics and Probability, A Raghu Raj Bahadur Festschrift*, Chapter On the speed of convergence to a class of max-stable laws, pp. 539–550. New Delhi: Wiley Eastern.

Sreehari, M. (1995). Maximum stability and a generalization. *Statist. Probab. Lett. 23*(4), 339–342.

Sreehari, M. (2004). A note on compound distributions. *Stat. Methods 6*(1), 66–81.

Sreehari, M. (2009). General max-stable laws. *Extremes 12*(2), 187–200.

Sreehari, M. and P. D. Kirkire (1998). Generating non-normal stable variables. In *Frontiers in probability and statistics (Calcutta, 1994/1995)*, pp. 361–364. New Delhi: Narosa.

Sreehari, M. and S. Ravi (2010). On extremes of mixtures of distributions. *Metrika 71*, 117–123.

Sreehari, M., S. Ravi, and R. Vasudeva (2011). On sums of independent random variables whose distributions belong to the max domain of attraction of max-stable laws. *Extremes 14*, 267–283.

Srinivasan, V., E. Kuruoglu, K.-R. Müller, W. Samek, and S. Nakajima (2019). Black-box decision based adversarial attack with symmetric α-stable distribution. Volume 2019-September.

Stachura, M. and B. Wodecka (2022). k-th record estimator of the scale parameter of the α-stable distribution. *Statistics in Transition New Series 23*(4), 203–215.

Stasinopoulos, M., R. Rigby, and F. De Bastiani (2018, 03). Gamlss: A distributional regression approach. *Statistical Modelling*, 1471082X1875914.

Steinbrecher, G. and B. Weyssow (2004, Mar). Generalized randomly amplified linear system driven by Gaussian noises: Extreme heavy tail and algebraic correlation decay in plasma turbulence. *Phys. Rev. Lett. 92*, 125003.

Stephens, M. A. (1970). Use of the Kolmogorov-Smirnov, Cramer-von Mises and related statistics without extensive tables. *Journal of the Royal Statistical Society, Series B 32*, 115–122.

Stephens, M. A. (1986). Tests based on EDF statistics. In R. B. D'Agostino and M. A. Stevens (Eds.), *Goodness-of-Fit Techniques*. N.Y.: Marcel Dekker.

Stephenson, A. G. (2003). Simulating multivariate extreme value distributions of logistic type. *Extremes 6*(1), 49–59.

Steutel, F. and K. Van Harn (2004). *Infinite divisibility of probability distributions on the real line*. NY, NY: Marcel Dekker.

Steutel, F. W. and K. van Harn (1979). Discrete analogues of self-decomposability and stability. *The Annals of Probability 7*(5), 893–899.

Stewart, G. W. (1967). A modification of Davidon's minimization method to accept difference approximations of derivatives. *Journal of the ACM 14*, 72–83.

Stewart, J. (1976). Positive definite functions and generalizations, an historical survey. *Rocky Mountain Journal of Mathematics 6*(3), 409 – 434.

Stinga, P. R. (2023). Fractional derivatives: Fourier, elephants, memory effects, viscoelastic materials, and anomalous diffusions. *Notices of the AMS 70*(4), 576–587. https://doi.org/10.1090/noti2663.

Stinga, P. R. and M. Vaughan (2020). One-sided fractional derivatives, fractional laplacians, and weighted sobolev spaces. *Nonlinear Analysis 193*, 111505. Nonlocal and Fractional Phenomena.

Stinga, P. R. and M. Vaughan (2021). Fractional elliptic equations in nondivergence form: definition, applications and harnack inequality. arXiv 2012.14779.

Stoyanov, S., G. Samorodnitsky, S. T. Rachev, and S. Ortobelli (2006). Computing the portfolio conditional value-at-risk in the stable case. *Probability and Mathematical Statistics 26*(1), 1–22.

Strassen, V. (1965). The existence of probability measures with given marginals. *Ann. Math. Stat. 36*, 423–439.

Stringer, C., M. Pachitariu, N. Steinmetz, M. Carandini, and K. D. Harris (2019). High-dimensional geometry of population responses in visual cortex. *Nature 571*, 361–365.

Strobl, G. R. (1997). *The physics of polymers : concepts for understanding their structures and behavior, 2nd Ed.* Springer.

Stroud, A. H. (1971). *Approximate calculation of multiple integrals*. Englewood Cliffs, N.J.: Prentice-Hall Inc. Prentice-Hall Series in Automatic Computation.

Stuck, B. W. (1976a). Distinguishing stable probability measures, part i: Discrete time. *Bell System Technical Journal 55*(8), 1125–1182.

Stuck, B. W. (1976b). Distinguishing stable probability measures, part ii: Continuous time. *Bell System Technical Journal 55*(8), 1183–1196.

Stuck, B. W. (1976c). Explicit solutions to some single-period investment problems for risky log-stable stocks. *Journal of Financial Economics 3*, 277–294.

Stuck, B. W. (1978). Minimum error dispersion linear filtering of scalar symmetric stable processes. *EEE Transactions on Automatic Control 23*, 507–509.

Stuck, B. W. (2000). An historical overview of stable probability distributions insignal processing. In *Proceedings of ICASSP 2000*, Volume 6, pp. 3795–3797. IEEE.

Stuck, B. W. and B. Kleiner (1974). A statistical analysis of telephone noise. *Bell Syst. Tech. J. 53*(7), 1263–1320.

Sudakov, N. V. (1971). Gaussian random processes and measures of solid angles in Hilbert space. *Soviet Math. Dokl. 12*, 412–415.

Sun, T. (1963). A central limit theorem for non-linear functions of a normal stationary process. *J. Math. Mech. 12*, 945–978.

Sun, T. (1965). Some further results on central limit theorems for non-linear functions of a normal stationary process. *J. Math. Mech. 14*, 71–85.

Sundaram, S., K. McDonald, and D. A. Clifton (2010). Stable distributions for heavy-tailed data and their application in asset health monitoring. In *7th International Conference on Condition Monitoring and Machinery Failure Prevention Technologies 2010*. British Institute of Non-Destructive Testing (BINDT): Curran Associates, Inc. ISBN 9781618390134.

Surgailis, D. (1981). On l^2 and non-l^2 multiple stochastic integration. In *Stochastic Differential Systems*, New York, pp. 212–226. Lecture Notes in Control and Information Sciences, 36: Springer-Verlag.

Surgailis, D. (1982). Zones of attraction of self-similar multiple integrals. *Lithuanian Mat. Journal 22*, 327–340.

Surgailis, D. (1985). On the multiple stable integral. *Z. Wahrsch. verw. Gebiete 70*, 621–632.

Surgailis, D., J. Rosiński, V. Mandrekar, and S. Cambanis (1993). Stable mixed moving averages. *Probab. Theory Related Fields 97*, 543–558.

Suuronen, J., T. Soto, N. K. Chada, and L. Roininen (2023, aug). Bayesian inversion with α-stable priors. *Inverse Problems 39*(10), 105007.

Suzuki, J. L., M. Gulian, M. Zayernouri, and M. D'Elia (2022). Fractional modeling in action: A survey of nonlocal models for subsurface transport, turbulent flows, and anomalous materials. *Peridyn Nonlocal Model*. ResearchGate DOI: 10.13140/RG.2.2.13264.43526, https://doi.org/10.1007/s42102-022-00085-2.

Suzuki, M. (1983). Phase transition and fractals. *Progress of Theoretical Physics 69*, 65–76.

Suzuki, M. (1984). Finite-size scaling for transient similarity and fractals. *Prog. Theor. Phys. 71*, 1397–1400.

Swami, A. and B. Sadler (2002). On some detection and estimation problems in heavy-tailed noise. *Signal Processing 82*(12), 1829–1846.

Swihart, B. J. and J. P. Nolan (2022). The r journal: Multivariate subgaussian stable distributions in r. *The R Journal 14*, 292–301. https://doi.org/10.32614/RJ-2022-056.

Sy, W. (2006, May). On the coherence of VaR risk measures for Lévy stable distributions. Working Paper, Australian Prudential Regulation Authority. Online at www.apra.gov.au.

Sytaya, G. (1974). On some asymptotic representations of the gaussian measure in a Hilbert space. In *Theory of Stochastic Processes*, pp. 93–104. Ukrainian Academy of Sciences. Publication 2.

Szabo, T. (1994). Time domain wave equations for lossy media obeying a frequency power law. *J. Acoustic Society of America 96*(1), 491–500.

Szczotka, W. and W. A. Woyczyński (2003). Distributions of suprema of Lévy processes via the heavy traffic invariance principle. *Probab. Math. Statist. 23*(2, Acta Univ. Wratislav. No. 2593), 251–272.

Szczotka, W. and W. A. Woyczyński (2004). Heavy-tailed dependent queues in heavy traffic. *Probab. Math. Statist. 24*(1, Acta Univ. Wratislav. No. 2646), 67–96.

Szczurek, A., M. Maciejewska, A. Wyłomańska, G. Sikora, M. Balcerek, and M. Teuerle (2016). Discrimination of particulate matter emission sources using stochastic methods. *Physica A: Statistical Mechanics and its Applications 463*, 452–466.

Szegö, G. and G. Pólya (1931). Über den transfiniten durchmesser (kapazitätskonstante) von ebenen und räumlichen punktmengen. *Journal fur die reine und angewandte Mathematik 1931*(165), 4–49.

Székely, G. and M. Rizzo (2004, 11). Testing for equal distributions in high dimension. *InterStat 5*.

Székely, G. J. and M. L. Rizzo (2009). Brownian distance covariance. *Ann. Appl. Stat. 3*(4), 1236–1265.

Székely, G. J., M. L. Rizzo, and N. K. Bakirov (2007). Measuring and testing dependence by correlation of distances. *Ann. Statist. 35*(6), 2769–2794.

Sztencel, R. (1981). On boundedness and convergence of some Banach space valued random series. *Probab. Math. Stat. 2*, 83–88.

Sztencel, R. (1986). Absolute continuity of the lower tail of stable seminorms. *Bull. Pol. Acad. Sci. Math. 34*, 231–234.

Sztonyk, P. (2003). Boundary potential theory for stable Lévy processes. *Colloquium Mathematicae 95*(2), 191–206.

Szulga, J. (1989). Multiple stochastic integrals with respect to symmetric infinitely divisible random measures. Preprint.

Szulga, J. and W. Woyczynski (1983). Existence of a double random integral with respect to stable measures. *Journal of Multivariate Analysis 13*, 194–201.

Sındırgı, P. A. (2023). Closed-form alternative for the frequency distribution of stably distributed random components in daily-mean self-potential (sp) time series: Example from Urla Station, Turkey. *Pure Appl. Geophys. https://doi.org/10.1007/s00024-023-03302-1.*

Tafakori, L. and A. R. Soltani (2017). A note on the cauchy-type mixture distributions. *Journal of Statistical Computation and Simulation 87*(9), 1901–1910.

Takács, L. (1962). *An Introduction to Queueing Theory.* New York: Oxford University Press.

Takano, T. (1954). On some limit theorems of probability distributions. *Ann. Inst. Stat. Math. Tokyo 6*, 37–113.

Takashima, K. (1991). Sample path properties of ergodic self-similar processes. *Osaka J. Math. 26*, 159–189.

Takayasu, H. (1984, 09). Stable distribution and Lévy process in fractal turbulence. *Progress of Theoretical Physics 72*(3), 471–479.

Takenaka, S. (1987). Representations of Euclidean random field. *Nagoya Math. J. 105*, 19–31.

Takenaka, S. (1991). Integral-geometric construction of self-similar stable processes. *Nagoya Math. J. 123*, 1–12.

Takenaka, S. (1993). Examples of self-similar stable processes. In S. Cambanis, J. Ghosh, R. Karandikar, and P. Sen (Eds.), *Stochastic Processes. A Festschrift in Honour of Gopinath Kallianpur*, pp. 303–311. New York: Springer Verlag.

Takeuchi, J. (1964). On the sample paths of the symmetric stable processes in spaces. *J. Math. Soc. Japan 16*(2), 109–127.

Talagrand, M. (1987). Regularity of Gaussian processes. *Acta Mathematica 159*, 99–149.

Talagrand, M. (1988). Necessary conditions for sample boundedness of p-stable processes. *The Annals of Probability 16*, 1584–1595.

Talagrand, M. (1990). Characterization of almost surely continuous 1-stable random Fourier series an strongly stationary processes. *The Annals of Probability 18*, 85–91.

Talagrand, M. (1993). New gaussian estimates for enlarged balls. *Geometric Functonal Analysis 3*, 502–520.

Talagrand, M. (1995). Hausdorff measure of trajectories of multiparameter fractional brownian motion. *The Annals of Probability 23*, 767–775.

Taleb, N. N. (2010). *The Black Swan: Second Edition: The Impact of the Highly Improbable* (Second Edition ed.). NY, NY: Random House.

Talebi, S. P., S. Werner, and D. P. Mandic (2018, Oct). Distributed adaptive filtering ofα-stable signals. *IEEE Signal Processing Letters 25*(10), 1450–1454.

Talebi, S. P., S. Werner, Y. Xia, C. C. Took, and D. P. Mandic (2022). A joint particle filter for quaternion-valued ¡tex¿α¡/tex¿-stable signals via the characteristic function. In *2022 IEEE 12th Sensor Array and Multichannel Signal Processing Workshop (SAM)*, pp. 390–394.

Tankov, P. (2007). Lévy processes in finance and risk management. *Wilmott Magazine Sep.-Oct.*

Tapiero, C. S. and P. Vallois (2018). Randomness and fractional stable distributions. *Physica A: Statistical Mechanics and its Applications 511*, 54–60.

Taqqu, M. (1975). Weak convergence to fractional Brownian motion and to the Rosenblatt process. *Zeitschrift für Wahrscheinlichkeitstheorie und verwandte Gebiete 31*, 287–302.

Taqqu, M. (1977). Law of the iterated logarithm for sums of non-linear functions of the Gaussian variables that exhibit a long range dependence. *Zeitschrift für Wahrscheinlichkeitstheorie und verwandte Gebiete 40*, 203–238.

Taqqu, M. (1978). A representation for self-similar processes. *Stochastic Proc. and their Applic. 7*, 55–64.

Taqqu, M. (1979). Convergence of integrated processes of arbitrary Hermite rank. *Zeitschrift für Wahrscheinlichkeitstheorie und verwandte Gebiete 50*, 53–83.

Taqqu, M. (1981). Self-similar processes and related ultraviolet and infrared catastrophes. In *Random Fields: Rigorous Results in Statistical Mechanics and Quantum Field Theory*, Amsterdam, pp. 1027–1096. Colloquia Mathematica Societatis Janos Bolyai: North-Holland. Vol.27 Book 2.

Taqqu, M. (1986a). A bibliographical guide to self-similar processes and long-range dependence. In E. Eberlein and M. Taqqu (Eds.), *Dependence in Probability and Statistics*, Boston, pp. 137–162. Birkhäuser.

Taqqu, M. (1986b). Sojourn in an elliptical domain. *Stochastic Processes and their Applications 21*, 319–326.

Taqqu, M. (1987a). Random processes with long-range dependence and high variability. *J. Geophys. Research 92*, 9683–9686.

Taqqu, M. (1987b). Toeplitz matrices and estimation of time series with long-range dependence. In Y. Prohorov and V. Sazonov (Eds.), *Proceedings of the Bernoulli Congress, Tashkent, USSR*, Holland, pp. 75–83. VNU Science Press BV. Vol. 1.

Taqqu, M. (1988a). Self-similar processes. In S. Kotz and N. Johnson (Eds.), *Encyclopedia of Statistical Sciences*, pp. 352–357. New York: Wiley. Volume 8.

Taqqu, M. (1988b). Weak stationary. In S. Kotz and N. Johnson (Eds.), *Encyclopedia of Statistical Sciences*, pp. 540. New York: Wiley. Volume 9.

Taqqu, M. and C. Czado (1985a). Reproducing kernel Hilbert space for some non-Gaussian processes. In A. B. et al. (Ed.), *Probability in Banach Spaces V*, New York, pp. 128–140. Refereed proceedings of the International Conference held in Medford, USA, July 16-27, 1984: Springer-Verlag, Lecture Notes in Mathematics. Vol.1153.

Taqqu, M. and C. Czado (1985b). A survey of functional laws of the iterated logarithm for self-similar processes. *Stochastic Models 1*(1), 77–115.

Taqqu, M. and J. Goldberg (1982). Regular multigraphs and their applications to the Monte Carlo evaluation of moments of non-linear functionals of Gaussian processes. *Stochastic Processes and their Applications 13*, 121–138.

Taqqu, M. and J. Levy (1986). Using renewal processes to generate long-range dependence and high variability. In E. Eberlein and M. Taqqu (Eds.), *Dependence in Probability and Statistics*, Boston, pp. 73–89. Birkhäuser.

Taqqu, M. and W. Willinger (1984). A geometric approach to constructing martingale measures: the discrete case. Tech Report 635, School of Operations Research and Industrial Engineering, Cornell University.

Taqqu, M. and W. Willinger (1987). The analysis of finite security markets using martingales. *Advances in Applied Probability 19*, 1–25.

Taqqu, M. and R. Wolpert (1983). Infinite variance self-similar processes subordinate to a Poisson measure. *Zeitschrift für Wahrscheinlichkeitstheorie und verwandte Gebiete 62*, 53–72.

Taroudakis, M. I., G. Tzagkarakisb, and P. Tsakalides (2006). Classification of shallow-water acoustic signals via alpha-stable modeling of the one-dimensional wavelet coefficients. *Journal of the Acoustic Society of America 119*, 1396–1405.

Tavana, M., H. Parvin, and F. Rezazadeh (2017, 04). Parkinson detection: An image processing approach. *Journal of Medical Imaging and Health Informatics 7*, 464–472.

Taylor, S. J. (1961). On the connexion between Hausdorff measures and generalized capacity. *57*(3), 524—-531.

Taylor, S. J. (1986). *Modelling Financial Time Series*. New York: Wiley.

Teimouri, M. (2020). Statistical inference for stable distribution using EM algorithm. *Journal of Statistical Sciences 14*(1).

Teimouri, M., S. Rezakhah, and A. Mohammadpour (2015). Entropy-based goodness-of-fit test for positive stable law. *AIP Conference Proceedings 1641*(1), 456–462.

Teimouri, M., S. Rezakhah, and A. Mohammadpour (2017). U-statistic for multivariate stable distributions. *Journal of Probability Statistics 2017*(3483827), 1–12. https://doi.org/10.1155/2017/3483827.

Teitler, S., A. Rajagopal, and K. Ngai (1982). Relaxation processes and time scale transformations. *Phys. Rev. 26*, 2906–2912.

Terdik, G. and W. A. Woyczyński (2006). Rosiński measures for tempered stable and related Ornstein-Uhlenbeck processes. *Probab. Math. Statist. 26*(2), 213–243.

Terrin, N. and M. Taqqu (1990a). A noncentral limit theorem for quadratic forms of Gaussian stationary sequences. *J. Theor. Probab. 3*, 449–475.

Terrin, N. and M. Taqqu (1990b). Quadratic forms with long-range dependence. In B. Grigelionis, Y. Prohorov, V. Sazonov, and V. Statulevičius (Eds.), *Probability Theory and Mathematical Statistics. Proceedings of the Fifth Vilnius Conference June 25-July 1, 1989*, Volume 2, Utrecht, the Netherlands, pp. 466–473. VSP BV Press.

Terrin, N. and M. Taqqu (1991a). Convergence in distribution of sums of bivariate Appell polynomials with long-range dependence. *Prob. Th. and Rel. Fields 90*, 57–81.

Terrin, N. and M. Taqqu (1991b). Convergence to a Gaussian limit as the normalization exponent tends to 1/2. *Statistics and Probability Letters 11*, 419–427.

Terrin, N. and M. Taqqu (1991c). Power counting theorem on R^n. In R. Durrett and H. Kesten (Eds.), *Spitzer Festschrift*. Boston: Birkhäuser. To appear.

Teugels, J. (1975). The class of subexponential distributions. *The Annals of Probability 3*, 1000–1011.

Tewfik, A. and M. Kim (1992). Correlation structure of the discrete wavelet coefficients of fractional Brownian motions. *IEEE Trans. on Info. Theory IT-38*(2), 904–909.

Thomas, E. G. F. (2014). A polarization identity for multilinear maps. *Indag. Math. (N.S.) 25*(3), 468–474. With an appendix by Tom H. Koornwinder.

Thore, C.-J. (2016). Fminsdp - a code for solving optimization problems with matrix inequality constraints. MathWorks File Exchange. https://se.mathworks.com/matlabcentral/fileexchange/43643-fminsdp.

Tian, H., A. Yim, and D. Newton (2020). Tail-heaviness, asymmetry, and profitability forecasting by quantile regression. *Management Science*.

Titchmarsh, E. (1986). *Introduction to the Theory of Fourier Integrals* (3rd ed.). New York: Chelsea.

Tkachuk, S. (1973a). Large deviations for a class of distributions. *Trudy TashGU 446*, 161–164. In Russian.

Tkachuk, S. (1973b). Local limit theorems taking into account large deviations in the case of stable limit laws. *Izv. ANUzSSR 2*, 30–33. In Russian.

Tkachuk, S. (1974). A theorem on large deviations in R^d in the case of stable limit law. pp. 178–186. In Russian.

Tkachuk, S. (1976). Integral limit theorem for the number of renewals. *Trudy TashGU 490*, 185–188. In Russian.

Todorov, V. (2019). Nonparametric inference for the spectral measure of a bivariate pure-jump semimartingale. *Stochastic Processes and their Applications 129*(2), 419–451.

Todorovic, P. (1987). An extremal problem arising in soil erosion modeling. In *Applied Probability, Stochastic Processes and Sampling Theory*, pp. 65–73. Reidel Dordrecht.

Todorovic, P. and J. Gani (1987). Modeling of the effect of erosion on crop production. *J. Appl. Prob. 24*, 787–797.

Tommaasi, F., E. Ignesti, S. Lepri, and S. Cavalieri (2016). Robustness of replica symmetry breaking phenomenology in random laser. *Scientific Reports 6*(37113). doi: 10.1038/srep37113.

Tommasi, F., L. Fini, F. Martelli, and S. Cavalieri (2019, Jun). Superdiffusive random laser. *Phys. Rev. A 99*, 063836.

Tortrat, A. (1975). Pseudo-martingales et lois stables. *C. R. Acad. Sci. Paris 281*(Ser. A), 463–465.

Tortrat, A. (1980). Lois de zéro-un pour des probabilités semi-stables ou plus générales, dans un espace vectoriel ou un groupe (abélien ou non). In *Colloque de Saint-Flour*. Publication du C.N.R.S.

Tortrat, A. (1981). Loi stables dans un groupe. *Ann. Inst. Henri Poincaré 17*, 51–61.

Tortrat, A. (1982). Loi de zéro-un et lois semi-stables dans un group. In *Lecture Notes in Math.*, Volume 928, pp. 452–465. Springer-Verlag.

Toulemonde, G., A. Guillou, P. Naveau, M. Vrac, and F. Chevallier (2010). Autoregressive models for maxima and their applications to CH_4 and N_2O. *Environmetrics 21*(2), 189–207.

Tran, N. M. (2022). The tropical geometry of causal inference for extremes.

Travis, J. (2007). Do wandering albatrosses care about math? *Science 318*(5851), 742 – 743.

Tripathi, G., V. K. Yadav, J. Singh, and V. Mishra (2020). *Analytical Methods of Water Pollutants Detection*, pp. 63–78. Singapore: Springer Singapore.

Truong, C., L. Oudre, and N. Vayatis (2018, January). A review of change point detection methods. *ArXiv e-prints*.

Tsakalides, P. (1995, December). *Array Signal Processing with Alpha-Stable Distributions*. Ph. D. thesis, University Southern California.

Tsakalides, P. and C. Nikias (1995). Maximum likelihood localization of sources in noise modeled as a stable processes. *IEEE Trans. on Signal Proc. 43*, 2700–2713.

Tsakalides, P. and C. Nikias (1998). *A practical guide to heavy tails*, Chapter Deviation from normality in statistical signal processing: parameter estimation with alpha-stable distributions, pp. 379–404. Boston: Birkhäuser.

Tsakalides, P. and C. L. Nikias (1999). Robust space-time adaptive processing (STAP) in non-Gaussian clutter environments. *IEE Proceedings: Radar, Sonar and Navigation 146*(2), 84–93.

Tsakalides, P., R. Raspanti, and C. L. Nikias (1999). Angle/doppler estimation in heavy-tailed clutter backgrounds. *IEEE Transactions on Aerospace and Electronic Systems 35*(2), 419–436.

Tsakalides, P., F. Trinic, and C. L. Nikias (2000). Performance assessment of CFAR processors in Pearson-distributed clutter. *IEEE Transactions on Aerospace and Electronic Systems 36*(4), 1377–386.

Tsihrintzis, G. and C. Nikias (1996). Fast estimation of the parameters of alpha-stable impulsive interference. *IEEE Transactions on Signal Processing 44*(6), 1492–1503.

Tsihrintzis, G. A. and C. L. Nikias (1995). Detection of impulsive stochastic transients over background noise. *Signal Processing 41*(2), 175 – 190.

Tsilevich, N. and A. Vershik (1999). Quasi-invariance of the gamma process and multiplicative properties of the Poisson-Dirichlet measures. *C. R. Acad. Sci. Paris Sér. I Math. 329*(2), 163–168.

Tsionas, E. G. (1999). Monte Carlo inference in econometric models with symmetric stable disturbances. *Journal of Econometrics 88*, 365–401.

Tsionas, E. G. (2000). Numerical Bayesian inference with arbitrary prior. *Statistical Papers [Formerly: Statistischen Hefte] 41*(4), 437–451.

Tsionas, E. G. (2013). Bayesian analysis of multivariate stable distributions using one-dimensional projections. unpublished.

Tuerlinckx, F. (2004). A multivariate counting process with Weibull distributed first-arrival times. *Journal of Mathematical Psychology 48*, 65–79.

Tukey, J. W. (1965). Data analysis and the frontiers of geophysics. *Science 148*(3675), 1283–1289.

Tunaley, J. (1972). Conduction in a random lattice under a potential gradient. *J. Appl. Phys. 43*, 4783–4786.

Turkman, K. F. and A. Walker (1984). On the asymptotics of maxima of trigonometric polynomials with random coefficients. *Advances in Applied Probability 16*, 819–842.

Tweedie, M. C. K. (1947). Functions of a statistical variate with given means, with special reference to Laplacian distributions. *Proc. Cambridge Philos. Soc. 43*, 41–49.

Tweedie, M. C. K. (1957). Statistical properties of inverse Gaussian distributions. I, II. *Ann. Math. Statist. 28*, 362–377, 696–705.

Tweedie, M. C. K. (1984). An index which distinguishes between some important exponential families. In *Statistics: applications and new directions (Calcutta, 1981)*, pp. 579–604. Calcutta: Indian Statist. Inst.

Tyran-Kamińska, M. (2010a). Convergence to Lévy stable processes under some weak dependence conditions. *Stochastic Process. Appl. 120*(9), 1629–1650.

Tyran-Kamińska, M. (2010b). Functional limit theorems for linear processes in the domain of attraction of stable laws. *Statist. Probab. Lett. 80*(11-12), 975–981.

Tyran-Kamińska, M. (2010c). Weak convergence to Lévy stable processes in dynamical systems. *Stoch. Dyn. 10*(2), 263–289.

Tzagkarakis, G. and F. Maurer (2022). Horizon-adaptive extreme risk quantification for cryptocurrency assets. *Computational Economics*. https://doi.org/10.1007/s10614-022-10300-3.

Tzagkarakis, G., F. Maurer, and J. P. Nolan (2023). Taming impulsive high-frequency data using optimal sampling periods. *Annals of Operations Research*. Accepted, to appear.

Tzagkarakis, G., J. P. Nolan, and P. Tsakalides (2018). Compressive sensing of temporally correlated sources using isotropic multivariate stable laws. *EUSIPCO 2018: 26th European Signal Processing Conference*.

Tzagkarakis, G., J. P. Nolan, and P. Tsakalides (2019, Feb). Compressive sensing using symmetric alpha-stable distributions for robust sparse signal reconstruction. *IEEE Transactions on Signal Processing 67*(3), 808–820.

Tzagkarakis, G., J. P. Nolan, and P. Tsakalides (2021). Robust nonlinear compressive sampling using symmetric alpha-stable distributions. *Signal Processing 182*, 107944.

Tzagkarakis, G. and P. Tsakalides (2009). Bayesian compressed sensing of a highly impulsive signal in heavy-tailed noise using a multivariate cauchy prior. In *Proceedings of the 17th European Signal Processing Conference (EUSIPCO 2009)*.

Uchaikin, V. V. (2013a). *Fractional derivatives for physicists and engineers. Volume I.* Nonlinear Physical Science. Higher Education Press, Beijing; Springer, Heidelberg. Background and theory.

Uchaikin, V. V. (2013b). *Fractional derivatives for physicists and engineers. Volume II.* Nonlinear Physical Science. Higher Education Press, Beijing; Springer, Heidelberg. Applications.

Uchaikin, V. V. and G. G. Gusarov (1999). Simulation of random vectors from three-dimensional spherically symmetric stable distributions. *J. Math. Sci. (New York) 93*(4), 591–599.

Uchaikin, V. V. and R. Sibatov (2013). *Fractional kinetics in solids : anomalous charge transport in semiconductors, dielectrics, and nanosystems*. World Scientific, Singapore.

Uchaikin, V. V. and V. M. Zolotarev (1999). *Chance and Stability*. Utrecht: VSP Press.

Uchiyama, K. (2016). Density of space-time distribution of brownian first hitting of a disc and a ball. *Potential Anal 44*, 497–541.

Unser, M. and P. D. Tafti (2014). *An Introduction to Sparse Stochastic Processes*. Cambridge, UK: Cambridge University Press.

Uppu, R. and S. Mujumdar (2014, Aug). Lévy exponents as universal identifiers of threshold and criticality in random lasers. *Phys. Rev. A 90*, 025801.

Urbanik, K. (1964). Generalized convolutions. *Studia Math. 23*, 217–245.

Ushakov, N. G. (1999). *Selected Topics in Characteristic Functions*. Utrecht: VSP Press.

Uyanto, S. S. (2017). Coefficient of relationship for two symmetric alpha-stable variables when alpha is in the interval (1,2]. *Communications in Statistics - Theory and Methods 46*(14), 6874–6881.

Vakolbinger, A. and V. A. Vatutin (1998). Branching processes in long-lived particles. *Teor. Veroyatnost. i Primenen. 43*(4), 655–671.

Valenti, D., C. Guarcello, and B. Spagnolo (2014, June). Switching times in long-overlap Josephson junctions subject to thermal fluctuations and non-Gaussian noise sources. *Phys. Rev. B 89*, 214510.

Vamvakos, S. and V. Anantharam (1996). On the departure process of a leaky bucket system with long–range dependent input traffic. Preprint.

Van den Heuvel, F., F. Fiorini, N. Schreuder, and B. George (2018, 03). Using stable distributions to characterize proton pencil beams. *Medical Physics 45*.

Van den Heuvel, F., S. Hackett, F. Fiorini, C. Taylor, S. Darby, and K. Vallis (2015). Su-f-brd-04: Robustness analysis of proton breast treatments using an alpha-stable distribution parameterization. *Medical Physics 42*(6 Part 25), 3526–3526.

van der Vaart, A. W. (1998). *Asymptotic Statistics*. Cambridge University Press.

Van Vliet, C. M. (1987). *Noise in Physical Systems and 1/f Noise*. Singapore: World Scientific.

van Zyl, J. M. and R. Schall (2009). Weighted estimation of the location parameter of a symmetric stable distribution. Preprint, Univ. of the Free State, S. Africa.

Vankov, E. R., M. Guindani, and K. B. Ensor (2019). Filtering and estimation for a class of stochastic volatility models with intractable likelihoods. *Bayesian Analysis 14*(1), 29–52.

Varadhan, S. (1962). Limit theorems for sums of independent random variables with values in a Hilbert space. *Sankhya 24*(Ser.A), 213–238.

Vasiukevich, A. and E. Pinsky (2022). Constructing portfolios using stable distributions: The case of S&P 500 sectors exchange-traded funds. *Machine Learning with Applications*, 100434.

Vaupel, J. W., K. G. Manton, and E. Stallard (1979). The impact of heterogeneity on individual frailty on the dynamics of mortality. *Demography 16*, 439–454.

Véhel, J. L., A. Philippe, and C. Robet (2021). Explicit and combined estimators for parameters of stable distributions. *Statistics 0*(0), 1–29.

Velis, D. R. (2003). Estimating the distribution of primary reflection coefficients. *Geophysics 68*(4), 1417–1422.

Venzon, D. J. and S. H. Moolgavkar (1988). A method for computing profile-likelihood-based confidence intervals. *Journal of the Royal Statistical Society. Series C (Applied Statistics) 37*(1), pp. 87–94.

Verdi, M. (2014, August). Calculating properties for shape classification using Lévy flights. Seminar slides. Presentation to SURF Program at NIST.

Vere-Jones, D. (1970). Stochastic models for earthquake occurencies. *Journal Royal Stat. Soc., Ser. B 532*, 1–42.

Vergassola, M. and U. Frisch (1991). Wavelet transforms of self-similar processes. *Physica D 54*, 58–64.

Vervaat, W. (1979). On a stochastic difference equation and a representation of non-negative infinitely divisible random variables. *Advances in Applied Probability 11*, 750–783.

Vervaat, W. (1985). Sample paths of self-similar processes with stationary increments. *The Annals of Probability 13*, 1–27.

Vervaat, W. (1987). Properties of general self-similar processes. *Bulletin of the International Statistical Institute 52*(Book 4), 199–216.

Vijverberg, W. and T. Hasebe (2021). Gtl regression: a linear model with skewed and thick-tailed disturbances. *Communications in Statistics - Simulation and Computation 0*(0), 1–27.

Virkar, Y. and A. Clauset (2014). Power-law distributions in binned empirical data. *Ann. Appl. Stat. 8*(1), 89–119.

Viswanathan, G. M. (2010). Ecology: Fish in Lévy-flight foraging. *Nature 465*, 1018–1019.

Viswanathan, G. M., V. Afanasyev, S. V. Buldyrev, E. J. Murphy, P. A. Prince, and H. E. Stanley (1996). Lévy flight search patterns of wandering albatrosses. *Nature 381*, 413 – 415.

Viswanathan, G. M., S. V. Buldyrev, S. Havlin, M. G. E. da Luz, E. P. Raposo, and H. E. Stanley (1999). Optimizing the success of random searches. *Nature 401*, 911 – 914.

Vlahos, L., H. Isliker, Y. Kominis, and K. Hizanidis (2008). Normal and anomalous diffusion: A tutorial. In T. Bountis (Ed.), *Order and Chaos*, Volume 10. Patras University Press.

Vo Thi, T. (2021). *Nature of Computation and Communication. ICTCC 2021*, Volume 408 of *Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering*, Chapter Stable Random Vector and Gaussian Copula for Stock Market Data. Springer. https://doi.org/10.1007/978-3-030-92942-8_16.

Volkovich, Z. V., D. Toledano-Kitai, and R. Avros (2010). On analytical properties of generalized convolutions. In *Stability in probability*, Volume 90 of *Banach Center Publ.*, pp. 243–274. Polish Acad. Sci. Inst. Math., Warsaw.

Vollert, A. (2001). Margrabe's option to exchange in a paretian-stable subordinate market. *Mathematical and Computer Modelling 34*, 1185–1197.

Vollmer, J. H. (2003, August). A survey of hill's estimator. Masters, University of Georgia, Athens, GA. https://getd.libs.uga.edu/pdfs/vollmer_jan_h_200308_ms.pdf.

Vynck, K., R. Pierrat, R. Carminati, L. S. Froufe-Pérez, F. Scheffold, R. Sapienza, S. Vignolini, and J. J. Sáenz (2023, November). Light in correlated disordered media. *Reviews of Modern Physics 95*(4).

Wainwright, M. J., E. P. Simoncelli, and A. S. Willsky (2001). Random cascades on wavelet trees and their use in analyzing and modeling natural images. *Applied and Computational Harmonic Analysis 11*, 89–123. doi:10.1006/acha.2000.0350.

Walker, A. (1965). Some asymptotic results for the periodogram of a stationary time series. *Journal of the Australian Mathematical Society 5*, 107–128.

Wallin, H. (1964). A connection between α-capacity and l^p-classes of differentiable functions. *Arkiv fur Matematik 5*(24), 331–341. https://doi.org/10.1007/BF02591134.

Walls, W. D. (2005). Modeling movie success when 'Nobody Knows Anything': Conditional stable-distribution analysis of film returns. *Journal of Cultural Economics 29*, 177–190.

Walls, W. D. and J. McKenzie (2019). Black swan models for the entertainment industry with an application to the movie business. *Empirical Economics*.

Walter, C. (1999). Lévy stable distribution and fractal structure of markets. *Mathematical and Computer Modelling 29*, 37–56.

Wan, P., T. Wang, R. A. Davis, and S. I. Resnick (2020). Are extreme value estimation methods useful for network data? *Extremes 23*, 171—-195. https://doi.org/10.1007/s10687-019-00359-x.

Wang, B., Z. Jiang, Y. Sun, and Y. Chen (2023). An intelligent signal processing method against impulsive noise interference in AIoT. *EURASIP J on Advances in Signal Processing 2023*(1). DOI 10.1186/s13634-023-01061-8.

Wang, B., E. Kuruoglu, and J. Zhang (2009a). ICA by maximizing non-stability. *Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics) 5441*, 179–186.

Wang, B., E. E. Kuruoglu, and J. Zhang (2009b). ICA by maximizing non-stability. In *Independent Component Analysis and Signal Separation: 8th International Conference*, pp. 179–186. Springer-Verlag.

Wang, J., E. Kuruoğlu, and T. Zhou (2011). Alpha-stable channel capacity. *IEEE Communications Letters 15*(10), 1107–1109. cited By 10.

Wang, L. and J.-H. Zhang (2008). Simpson's rule based FFT method to compute densities of stable distribution. In *Second International Symposium on Optimization and Systems Biology*, pp. 381–388. ORSC and APORC.

Wang, R. and D. P. Woodruff (2022, jan). Tight bounds for ℓ_1 oblivious subspace embeddings. *ACM Trans. Algorithms 18*(1).

Wang, R. and R. Zitikis (2020). An axiomatic foundation for the expected shortfall. *Management Science TBD*. Available at SSRN: https://ssrn.com/abstract=3423042.

Wang, W. and J. Yan (2021). Shape-restricted regression splines with r package splines2. *Journal of Data Science 19*(3), 498–517.

Wang, Z. and P. V. Bidarkota (2010). A long run risks model of asset pricing with fat tails. *Review of Finance 14*(3).

Wang, Z. and P. V. Bidarkota (2012). Risk premia in forward foreign exchange rates: A comparison of signal extraction and regression methods. *Empirical Economics 42*(1).

Wang, Z., M. Hu, E. Kuruoglu, W. Zhu, and G. Zhai (2018a). How do detected objects affect the noise distribution of terahertz security images? *IEEE Access 6*, 41087–41092.

Wang, Z., M. Hu, E. Kuruoglu, W. Zhu, and G. Zhai (2018b). How do detected objects affect the noise distribution of terahertz security images? *IEEE Access 6*, 41087–41092.

Wassell, J. T., W. C. Wojciechowski, and D. D. Landen (1999). Recurrent injury event-time analysis. *Statistics in Medicine 18*, 3355–3363.

Watanabe, T. (2007). Asymptotic estimates of multi-dimensional stable densities and their applications. *Trans. AMS 359*, 2851–2879.

Wegman, E. J. (1971, 12). A note on the estimation of the mode. *Ann. Math. Statist. 42*(6), 1909–1915.

Wei, Z., Y. Xu, and J. P. Nolan (2024). An alternative bearing fault detection strategy for vibrating screen bearings. *Journal of Vibration and Control*.

Weiss, L. (1960, 03). Two-sample tests for multivariate distributions. *Ann. Math. Statist. 31*(1), 159–164.

Wells, R. J. (1999). Rapid approximation to the Voigt/Faddeeva function and its derivatives. *JQSRT 62*, 29–48.

Wendel, J. G. (1980). Hitting spheres with brownian motion. *The Annals of Probability 8*(1), 164–169.

Weron, A. (1984). Stable processes and measures: A survey. Probability Theory on Vector Spaces III. In D. Szynal and A. Weron (Eds.), *Lecture Notes in Math.* **1080**, pp. 306–364. Berlin: Springer Verlag.

Weron, A. and K. Weron (1987). A statistical approach to relaxation in glassy materials. In P. B. *et al* (Ed.), *Math. Stat. Prob. Theory*, Volume B, pp. 245 – 254. Reidel.

Weron, K. (1991). A probabilistic mechanism hidden behind the universal power law for dielectric relaxation: General relaxation equation. *J. Phys.: Condens. Matter 3*, 9151–9162.

Weron, K. and A. Jurlewicz (1993). Two forms of self-similarity as a fundamental feature of the power-law dielectric response. *J. Phys. A: Math. Gen. 26*, 395–410.

Weron, K., A. Rajagopal, and K. Ngai (1984). Superposable distributions in condensed matter physics. Preprint.

Weron, R. (1996). On the Chambers-Mallows-Stuck method for simulating skewed stable random variables. *Statistics and Probablity Letters 28*, 165–171.

Weron, R. (2005, November). Heavy tails and electricity prices. Preprint, BundesBank November 2005 Conference.

Weron, R. (2006). *Modeling and Forecasting Electricity Loads and Prices: A Statistical Approach*. Wiley.

Wesselhöfft, N. and W. K. Härdle (2019). Risk-constrained Kelly portfolios under alpha-stable laws. *Computational Economics*.

West, B. J. (1999). *Physiology, Promiscuity and Prophecy at the Millennium: A Tail of Tails*. New Jersey: World Scientific.

West, B. J. (2016). *Fractional Calculus View of Complexity: Tomorrow's Science*. Boca Raton: CRC Press.

Weyl, H. (1916). Über die Gleichverteilung von Zahlen mod Eins. *Mathematische Annalen 77*, 313–352.

Wicker, N., J. Muller, R. K. R. Kalathur, and O. Poch (2008). A maximum likelihood approximation method for Dirichlet's parameter estimation. *Computational Statistics and Data Analysis 52*(3), 1315 – 1322.

Wickham, H., D. Cook, H. Hofmann, and A. Buja (2011). tourr: An R package for exploring multivariate data with projections. *Journal of Statistical Software 40*(2), 1–18.

Widom, H. (1961). Stable processes and integral equations. *Transactions of the American Mathematical Society 98*(3), 430–449.

Wiener, N. (1958). *Nonlinear Problems in Random Theory*. Cambridge: MIT Press.

Wienke, A. (2003, September). Frailty models. Working Paper WP 2003-032, Max-Planck-Institute for Demographic Research, Rostock, GERMANY.

Wikipedia (2017). Dawson function — Wikipedia, The Free Encyclopedia. [Online; accessed 8-January-2018].

Wikipedia contributors (2022). Riesz potential — Wikipedia, the free encyclopedia. `https://en.wikipedia.org/w/index.php?title=Riesz_potential&oldid=1072360173`. [Online; accessed 16-March-2022].

Willekens, E. (1986). *Higher order theory for subexponential distributions*. Ph. D. thesis, K.U. Leuven. In Dutch.

Willekens, E. (1987). On the supremum of an infinitely divisible process. *Stoch. Proc. Appl. 26*, 173–175.

Willemans, K. and P. Dierckx (1994a). Constrained surface fitting using Powell-Sabin splines. In *Wavelets, images, and surface fitting (Chamonix-Mont-Blanc, 1993)*, pp. 511–520. Wellesley, MA: A K Peters.

Willemans, K. and P. Dierckx (1994b). Surface fitting using convex Powell-Sabin splines. *J. Comput. Appl. Math. 56*(3), 263–282.

Willemans, K. and P. Dierckx (1995). Nonnegative surface fitting with Powell-Sabin splines. *Numer. Algorithms 9*(3-4), 263–276.

Willemans, K. and P. Dierckx (1996). Smoothing scattered data with a monotone Powell-Sabin spline surface. *Numer. Algorithms 12*(1-2), 215–232.

Williams, E. J. (1977). Some representations of stable random variables as products. *Biometrika 64*, 167 – 169.

Williams, G. and D. C. Watts (1970). Non-symmetrical dielectric relaxation behaviour arising from a simple empirical decay function. *Transactions of the Faraday Society 66*, 80.

Willinger, W., V. Paxson, and M. Taqqu (1998). *A practical guide to heavy tails*, Chapter Self-similarity and heavy tails: structural modeling of network traffic, pp. 27–54. Boston: Birkhauser.

Willinger, W. and M. Taqqu (1988). Pathwise approximations of processes based on the fine structure of their filtrations. In J. Azema, P. Meyer, and M. Yor (Eds.), *Lecture Notes in Mathematics*, New York, pp. 542–599. Seminaire de Probabilities XXII: Springer-Verlag.

Willinger, W. and M. Taqqu (1989). Pathwise stochastic integration and applications to the theory of continuous trading. *Stochastic Processes and their Application 32*, 253–280.

Willinger, W. and M. Taqqu (1991). Toward a convergence theory for continuous stochastic securities market models. *Mathematical Finance 1*, 55–99.

Willinger, W., M. Taqqu, M. Leland, and D. Wilson (1995a). Self–similarity in high–speed packet traffic: analysis and modelling of ethernet traffic measurements. *Statistical Science 10*, 67–85.

Willinger, W., M. Taqqu, M. Leland, and D. Wilson (1995b). Self–similarity through high variability: statistical analysis of ethernet lan traffic at the source level. *Computer Communications Review 25*, 100–113. Proceedings of the ACM/SIGCOMM'95, Cambridge, MA.

Willinger, W., M. Taqqu, R. Sherman, and D. Wilson (1997). Self–similarity through high variability: statistical analysis of ethernet lan traffic at the source level (extended version). *IEEE/ACM Transactions on Networking 5*, 71–96.

Wilson, D. J. (2019). The harmonic mean p-value for combining dependent tests. *Proceedings of the National Academy of Sciences 116*(4), 1195–1200.

Wilson, D. J. (2020). Generalized mean p-values for combining dependent tests: comparison of generalized central limit theorem and robust risk analysis. *Wellcome Open Research 5*(55).

Wilson, D. J. (2021, May). The Lévy combination test. *arXiv e-prints*, arXiv:2105.01501.

Win, M. Z., P. C. Pinto, and L. A. Shepp (2009). A mathematical theory of network interference and its applications. *Proceedings of the IEEE 97*(2), 205–230.

Wintner, A. (1936). On a class of Fourier transforms. *Amer. J. Math. 58*, 45–90.

Wise, J. (1966). Linear estimators for linear regression systems having infinite residual variances. Unpublished manuscript, Economics Department, Univesity of Hawaii.

Wiseman, L. M., J. F. Kelly, and R. J. McGough (2019). Exact and approximate analytical time-domain Green's functions for space-fractional wave equations. *The Journal of the Acoustical Society of America 146*(2), 1150–1163.

Wodecki, J., P. K. Stefaniak, W. Agnieszka, and R. Zimroz (2016). Combination of principal component analysis and time-frequency representations of multichannel vibration data for gearbox fault detection. *Journal of Vibroengineering 18*(4).

Wolf, D. (1978). Noise in physical systems. In *Springer Series in Electro-physics*, New York. Prof. of the Fifth International Conf. of Noise, Bad Nauheim, March 1978: Springer. Vol.2.

Wolfe, S. J. (1971). On moments of infinitely divisible distribution functions. *Ann. Math. Statist. 42*, 2036–2043.

Wolfe, S. J. (1972). A note on the complete convergence of stable distribution functions. *Ann. Math. Statist. 43*, 363–364.

Wolfe, S. J. (1973a). On the finite series expansion of multivariate characteristic functions. *J. Multivariate Anal. 3*, 328–335.

Wolfe, S. J. (1973b). On the local behavior of characteristic functions. *Ann. Probability 1*, 862–866.

Wolfe, S. J. (1975a). On derivatives of characteristic functions. *Ann. Probability 3*(4), 737–738.

Wolfe, S. J. (1975b). On moments of probability distribution functions. In *Fractional calculus and its applications (Proc. Internat. Conf., Univ. New Haven, West Haven, Conn., 1974)*, pp. 306–316. Lecture Notes in Math., Vol. 457. Berlin: Springer.

Wolfe, S. J. (1975c). On the unimodiality of spherically symmetric stable distribution functions. *J. Multivarate Anal. 5*, 236–242.

Wolfe, S. J. (1978a). On the unimodality of infinitely divisible distribution functions. *Z. Wahrsch. Verw. Gebiete 45*(4), 329–335.

Wolfe, S. J. (1978b). On the unimodality of multivariate symmetric distribution functions of class *L*. *J. Multivariate Anal. 8*(1), 141–145.

Wolfe, S. J. (1981). On the unimodality of infinitely divisible distribution functions. II. In *Analytical methods in probability theory (Oberwolfach, 1980)*, Volume 861 of *Lecture Notes in Math.*, pp. 178–183. Berlin: Springer.

Wolpert, R. L., S. E. Ogburn, and E. S. Calder (2016). The longevity of lava dome eruptions. *Journal of Geophysical Research: Solid Earth 121*(2), 676–686.

Wolpert, R. L. and M. S. Taqqu (2005, August). Fractional Ornstein-Uhlenbeck Lévy processes and the Telecom process: Upstairs and downstairs. *Signal Processing 85*(8), 1523–1545.

Woodruff, D. P. (2014). Sketching as a tool for numerical linear algebra. *Foundations and Trends in Theoretical Computer Science 10*(1–2), 1–157.

Woodruff, D. P. and T. Yasuda (2023, 04). New subset selection algorithms for low rank approximation: Offline and online. ResearchGate.

Wooster, R. (2009, January). Evolution systems of measures for non-autonomous Ornstein-Uhlenbeck processes with Lévy noise. arXiv:0901.2899v1.

Wornell, G. (1990). A Karhunen-Loève-like expansion for 1/f processes via wavelets. *IEEE Trans. Inform. Theory 36*, 859–861.

Wornell, G. (1991). Communication over fractal channels. In *Proceedings of the ICASSP 91–1991 International Conference on Acoustics, Speech and Signal Processing*.

Wornell, G. (1992). Wavelet-based representations for the $1/f$ family of fractal processes. Preprint, Submitted to *Proc. IEEE-Special Section on Applications of Fractals in Electrical Engineering*.

Wornell, G. and A. V. Oppenheim (1992a). Estimation of fractal signals from noisy measurements using wavelets. *IEEE Transactions on Information Theory 40*(3), 611–623.

Wornell, G. and A. V. Oppenheim (1992b). Wavelet-based representations for a class of self-similar signals with application to fractal modulation. *IEEE Transacations on Iinformation Theory 38*(2), 785–800.

Worsdale, G. (1975). Tables of cumulative distribution function for symmetric stable distr"ibutions. *Appl. Statistics 24*, 123–131.

Woyczyński, W. (2001). Lévy processes in the physical sciences. In *Lévy Processes*. Birkhäuser.

Wright, C. (2007, March/April). Tail tales. *CFA Magazine 18*(2), 35–43.

Wu, W. and S. Cambanis (1991). Conditional variance of symmetric stable variables. In S. Cambanis, G. Samorodnitsky, and M. Taqqu (Eds.), *Stable Processes and Related Topics*, Volume 25 of *Progress in Probability*, Boston, pp. 85–99. Birkhäuser.

Xiao, Y. (2006a). Properties of local-nondeterminism of Gaussian and stable random fields and their applications. *Ann. Fac. Sci. Toulouse Math. (6) 15*(1), 157–193.

Xiao, Y. (2006b). Properties of local-nondeterminism of Gaussian and stable random fields and their applications. *Ann. Fac. Sci. Toulouse Math. (6) 15*(1), 157–193.

Xiao, Y. (2010). Uniform modulus of continuity of random fields. *Monatsh. Math. 159*(1-2), 163–184.

Xiong, J. X. and T. Idzorek (2011). The impact of skewness and fat tails on the asset allocation decision. *Financial Analysts Journal 67*(2). Available at SSRN: http://ssrn.com/abstract=1807264.

Xiong, W., C. Schindelhauer, and H. So (2023, 06). Robust time-of-arrival localization via admm.

Xiong, W., C. Schindelhauer, H. C. So, and S. J. Rupitsch (2023). A message passing based iterative algorithm for robust TOA positioning in impulsive noise. *IEEE Transactions on Vehicular Technology 72*(1), 1048–1057.

Xu, C. W. (1995). Local nondeterminism and the uniform dimension of the inverse image of a Pólya process. *J. Wuhan Univ. Natur. Sci. Ed. 41*(5), 526–532.

Xu, Q. and K. Liu (2019, 06). A new feature extraction method for bearing faults in impulsive noise using fractional lower-order statistics. *Shock and Vibration 2019*, 1–13.

Xu, S., W. Wu, Y. Yang, B. Wang, and X. Wang. Analytical solution of stochastic real-time dispatch incorporating wind power uncertainty characterized by Cauchy distribution. *IET Renewable Power Generation n/a*(n/a).

Xue, X., C. Li, S. Cao, J. Sun, and L. Liu (2019). Fault diagnosis of rolling element bearings with a two-step scheme based on permutation entropy and random forests. *Entropy 21*(1).

Yaglom, A. (1955). Correlation theory of processes with stationary random increments of order n. *Mat. Sbornik 37*, 141–196. English translation in *Am. Math. Soc. Translations Ser. 2* **8**(1958), 87-141.

Yaglom, A. (1957). Some classes of random fields in n-dimensional space, related to stationary random processes. *Theory of Probability and its Applications 2*, 273–320. Trans. R.A. Silverman.

Yaglom, A. (1961). Second order homogeneous random fields. *Proc. 4th Berkeley Symp. Math., Stat. and Prob. 2*, 593–622.

Yajima, Y. (1985). On estimation of long-memory time series models. *Australian J. Statistics 27*(3), 303–320.

Yajima, Y. (1988). On estimation of a regression model with long-memory stationary errors. *The Annals of Statistics 16*, 791–807.

Yajima, Y. (1989). A central limit theorem of Fourier transforms of strongly dependent stationary processes. *Journal of Time Series Analysis 10*, 375–383.

Yajima, Y. (1991). Asymptotic properties of LSE in a regression model with long-memory stationary errors. *Ann. Statist. 19*, 158–177.

Yamanouchi, Y., T. Komatsu, and T. Nagai (2020). Zipf's law in SNS language space and stable distribution. Preprint.

Yamazato, M. (1978). Unimodality of infinitely divisible distribution functions of class L. *Ann. Prob. 6*, 523–531.

Yang, G. (2012, August). *The energy goodness-of-fit test for univariate stable distributions*. PhD thesis, Bowling Green State University.

Yang, J., T. Heinrich, J. Winkler, F. Lafond, P. Koutroumpis, and J. Farmer (2021, 01). Measuring productivity dispersion: a parametric approach using the lévy alpha-stable distribution.

Yang, X. and A. P. Petropulu (2001a). The extended alternating fractal renewal process for modeling traffic in high-speed communication networks. *IEEE Transactions On Signal Processing 49*(7), 1349–1363.

Yang, X. and A. P. Petropulu (2001b). Long-range dependent alpha-stable impulsive noise in a Poisson field of interferers. In *Proceedings of the 11th IEEE Signal Processing Workshop on Statistical Signal Processing*, pp. 54–57. IEEE.

Yang, X. and A. P. Petropulu (2003). Co-channel interference modeling and analysis in a poisson field of interferers in wireless communications. *IEEE Transactions On Signal Processing 51*(1), 61–76.

Yang, X.-S. (2018). *Optimization Techniques and Applications with Examples*. Hoboken, NJ: Wiley.

Yang, Z., K.-T. Fang, and S. Kotz (2007). On the Student's t-distribution and the t-statistic. *J. Multivariate Anal. 98*(6), 1293–1304.

Yanushkevichiene, O. and V. Saenko (2013, November). Estimation of the characteristic exponent of stable laws.

Yanushkevichius, R. and O. Yanushkevichiene (2007). Stability of a characterization by the identical distribution of linear forms. *Statistics 41*(4), 345–362.

Ye, Z. and C. Dang (2003). Parameter estimation for and α-stable self-similar process. Preprint.

Yilmaz, S. and F. Savaci (2015, 08). Stochastic resonance in Chua's circuit driven by alpha-stable noise. In *7th International Scientific Conference on Physics and Control, Istanbul*.

Yin, C. and X. Sha (2018). A new class of symmetric distributions including the elliptically symmetric logistic.

Yor, M. (1993). The distribution of Brownian quantiles. *J. of Appl. Probab.*, to appear.

Young, M. S. (2008). Revisiting non-normal real estate return distributions by property type in the U. S. *J. of Real Estate Finance and Economics 36*, 233–248.

Young, M. S. and R. J. Brown (2023). Real estate return distributions with new NCREIF data series. *Journal of Real Estate Portfolio Management 0*(0), 1–26.

Young, M. S. and R. A. Graff (1995). Real estate is not normal: a fresh look at real estate return distributions. *J. of Real Estate Finance and Economics 10*, 225 – 259.

Young, M. S., S. Lee, and S. Devaney (2006). Non-normal real estate return distributions by property type in the U. K. *J. of Property Research 23*, 109–133.

Yousufi, M., M. Amir, U. Javed, M. Tayyib, S. Abdullah, H. Ullah, I. M. Qureshi, M. W. Alimgeer, amd Khurram Saleem amd Akram, and K. B. Khan (2019). Application of compressive sensing to ultrasound images: A review. *BioMed Research International 7861651*, 1–14. https://doi.org/10.1155/2019/7861651.

Yu, G., C. Li, and J. Zhang (2013). A new statistical modeling and detection method for rolling element bearing faults based on alpha-stable distribution. *Mechanical Systems and Signal Processing 41*, 155–175.

Yu, J. (2004). Empirical characteristic function estimation and its applications. *Econometric Reviews 23*, 93–123.

Yu, J., A. P. Petropulu, and H. Sethu (2005). Rate-limited EAFRP a new improved model for high-speed network traffic. *IEEE Transactions On Signal Processing 53*(2), 505–522.

Yuan, D. and L. Lei (2016). Some results following from conditional characteristic functions. *Communications in Statistics – Theory and Methods 45*(12), 3706–3720.

Yuan, L., H. guang Sun, Y. Zhang, Y. ping Li, and B. qing Lu (2018). Statistical description of depth-dependent turbulent velocity measured in Taihu Lake, China. *Water Science and Engineering 11*(3), 243–249. https://doi.org/10.1016/j.wse.2018.09.005.

Yuozulinas, A. and V. I. Paulauskas (1998). Some remarks on the rate of convergence to stable laws. *Liet. Mat. Rink. 38*(4), 439–455.

Yurinski, V. (1974). Infinitely divisible distributions. *Theory Probab. Appl. 19*, 308–318.

Zaburdaev, V., S. Denisov, and J. Klafter (2015, Jun). Lévy walks. *Rev. Mod. Phys. 87*, 483–530.

Zaigraev, A. (1999). Multivariate large deviations with stable limit laws. *Probab. Math. Statist. 19*(2), 323–335.

Zaigraev, A. (2003). On asymptotic properties of multi-dimensional α-stable densities. Preprint 20, Nicolaus Copernicus University, Toruń.

Zaigraev, A. (2006). On asymptotic properties of multidimensional α-stable densities. *Math. Nachr. 279*(16), 1835–1854.

Zak, G., M. Teuerle, A. Wylomanska, and R. Zimroz (2017a). Data-driven iterative bibration signal enhanscement strategy using α-stable distributions. *Shock and Vibration 2017*, 1–11. Article ID 1963770.

Zak, G., M. Teuerle, A. Wylomanska, and R. Zimroz (2017b). Measures of dependence for α-stable distributed processes and its application to diagnosics of local damage in presence of impulsive noise. *Shock and Vibration 2017*, 1–9. Article ID 1963769.

Zak, G., A. Wylomanska, and R. Zimroz (2016). Data-driven vibration signal filtering procedure based on the α-stable distribution. *Journal of Vibroengineering 18*(2), 826–837.

Zak, T. (1984). On the continuity of the distribution function of a seminorm of stable random vectors. *Bull. Polish Acad. Sci. Math. 32*(7-8), 519–521.

Zak, T. (1989). A formula for the density of the norm of stable random vectors in Hilbert spaces. *Probab. Math. Statist. 10*(2), 257–270.

Zaliapin, I. V., Y. Y. Kagan, and F. Schoenberg (2005). Approximating the distribution of Pareto sums. *Pure Appl. Geophysics 162*, 1187–1228. http://moho.ess.ucla.edu/ kagan/tmoml.pdf.

Zarei, S., S. Arima, and G. Jona Lasinio. A new robust bayesian small area estimation via -stable model for estimating the proportion of athletic students in california. *Biometrical Journal n/a*(n/a).

Zawacki, C. and E. Abed (2023). The symmetric alpha-stable privacy mechanism. https://arxiv.org/abs/2311.17789.

Zha, D. and T. Qiu (2006a). A new blind source separation method based on fractional lower-order statistics. *International Journal of Adaptive Control and Signal Processing 20*(5), 213–223.

Zha, D. and T. Qiu (2006b). Underwater sources location in non-Gaussian impulsive noise environments. *Digital Signal Processing 16*(1), 149–163.

Zha, D. and T. Qiu (2007). Direction finding in non-Gaussian impulsive noise environments. *Digital Signal Processing 17*(2), 451–465.

Zhang, J. (2010). A highly efficient L-estimator for the location parameter of the Cauchy distribution. *Computational Statistics 25*, 97–105.

Zhang, X. (2018, December). Statistical methods for stable distributions using the empirical characteristic function. M. S. Thesis, American University, Washington, DC.

Zhang, Y., M. G. Schaap, and Y. Zha (2018). A high-resolution global map of soil hydraulic properties produced by a hierarchical parameterization of a physically based water retention model. *Water Resources Research 0*(0).

Zhang, Z. (2020). On studying extreme values and systematic risks with nonlinear time series models and tail dependence measures. *Statistical Theory and Related Fields 5*(1), 1–25.

Zhang, Z., J. Tong, Q. Meng, and Y. Liang (2021). Population dynamics driven by truncated stable processes with markovian switching. *Journal of Applied Probability 58*(2), 505–522.

Zhao, J., J. Li, Y. Zhao, J. He, and W. Khaled (2020). Checking heteroscedasticity in partially linear single-index models using pairwise distance. *IEEE Access*, 1–1.

Zhao, X. and R. J. McGough (2016). Time-domain comparisons of power law attenuation in causal and noncausal time-fractional wave equations. *J. Acoust. Soc. Am. 139*(5). DOI: 10.1121/1.4949539.

Zhao, Y.-Y. and J.-Q. Zhao (2022). Evaluating the adequacy of variance function using pairwise distances. *Journal of the Korean Statistical Society*. https://doi.org/10.1007/s42952-022-00168-2.

Zhao, Y.-Y., J.-Q. Zhao, and S.-A. Qian (2021). A new test for heteroscedasticity in single-index models. *Journal of Computational and Applied Mathematics 381*, 112993.

Zhao, Z. and W. B. Wu (2009). Nonparametric inference of discretely sampled stable Lévy processes. *J. of Econometrics 153*, 83–92. doi:10.1016/j.jeconom.2009.04.007.

Zhelezov, O. I. (2017). N-dimensional rotation matrix generation algorithm. *American Journal of Computational and Applied Mathematics 7*(2), 51–57.

Zhelezov, O. I. (2018). One modification which increases performance of n-dimensional rotation matrix generation algorithm. *International Journal of Chemistry Mathematics and Physics 2*(2), 13–18.

Zheng, C., M. Egan, L. Clavier, G. W. Peters, and J.-M. Gorce (2022). On the interference arising from random spatial fields of interferers utilizing multiple subcarriers. *J Wireless Com Network 27*. https://doi.org/10.1186/s13638-022-02110-w.

Zheng, M., G. García-Pérez, M. Boguñá, and M. Á. Serrano (2021). Scaling up real networks by geometric branching growth. *Proceedings of the National Academy of Sciences 118*(21).

Zhidkov, S. (2018a). Replication data for: Statistical characterization and modeling of noise effects in near-ultrasound aerial acoustic communications.

Zhidkov, S. V. (2018b). Statistical characterization and modeling of noise effects in near-ultrasound aerial acoustic communications. *The Journal of the Acoustical Society of America 144*(4), 2605–2612.

Zhong, X., K. Cai, P. Chen, and Z. Mei (2019, Apr). Design of Protograph Codes for Additive White Symmetric Alpha-Stable Noise Channels. *arXiv e-prints*, arXiv:1904.13245.

Zhou, B., D. Hofmann, I. Pinkoviezky, S. J. Sober, and I. Nemenman (2018). Chance, long tails, and inference in a non-Gaussian, Bayesian theory of vocal learning in songbirds. *Proceedings of the National Academy of Sciences 115*(36), E8538–E8546.

Zhou, J., P. Haygarth, P. Withers, C. Macleod, P. Falloon, K. Beven, M. Ockenden, K. Forber, M. Hollaway, R. Evans, A. Collins, K. Hiscock, C. Wearing, R. Kahana, and M. Villamizar (2016, 04). Lattice Boltzmann method for the fractional advection-diffusion equation. *Physical Review E 93*.

Zhou, T., Z. Peng, M. Gulian, and J. F. Brady (2021, jun). Distribution and pressure of active lévy swimmers under confinement. *Journal of Physics A: Mathematical and Theoretical 54*(27), 275002.

Zhou, Z. and J. Yu (2017, January). Estimation of block sparsity in compressive sensing. *ArXiv e-prints*.

Zhu, Q., J. Shen, and J. Ji (2020). Internal signal stochastic resonance of a two-component gene regulatory network under Lévy noise. *Nonlinear Dynamics 100*, 863–876. https://doi.org/10.1007/s11071-020-05489-7.

Zieba, D. (2019). Lévy processes on the cryptocurrency market. Working Papers 2019-15, Faculty of Economic Sciences, University of Warsaw. https://ideas.repec.org/p/war/wpaper/2019-15.html.

Zieliński, R. (2000a). A median-unbiased estimator of the characteristic exponent of a symmetric stable distribution. *Statistics 34*(4), 353–355.

Zieliński, R. (2000b). A reparametrization of the symmetric α-stable distributions and their dispersive ordering. *Teor. Veroyatnost. i Primenen. 45*(2), 410–411.

Zieliński, R. (2001). High accuracy evaluation of the cumulative distribution function of α-stable symmetric distributions. *J. of Math. Sciences 105*(6), 2631 – 2632.

Zimmermann, M. and K. Dostert (2002, Feb). Analysis and modeling of impulsive noise in broad-band powerline communications. *IEEE Transactions on Electromagnetic Compatibility 44*(1), 249–258.

Zolotarev, V. M. (1954). Vyrazhenie plotnosti ustoichivogo raspredeleniya s pokazatelem α bolshim edinitsy cherez plotnost s pokazatelem $1/\alpha$. *Doklady Akad. Nauk USSR (N.S.) 98*, 735–738.

Zolotarev, V. M. (1957). Mellin-Stieltjes transformations in probability theory. *Teor. Veroyatnost. i Primenen. 2*, 444–469.

Zolotarev, V. M. (1967). On the M-divisibility of stable laws. *Th. Prob. Appl. 12*, 506–508.

Zolotarev, V. M. (1981). Integral transformations of distributions and estimates of parameters of multidimensional spherically symmetric stable laws. In *Contributions to Probability*, pp. 283–305. New York: Academic Press.

Zolotarev, V. M. (1983). *Odnomernye ustoichivye raspredeleniya.* Moscow: Nauka. Subsequently translated as "One-dimensional Stable Distributions", American Mathematical Society, 1986.

Zolotarev, V. M. (1986a). Asymptotic behavior of the Gaussian measure in l_2. *J. Soviet Math. 24*, 2330–2334.

Zolotarev, V. M. (1986b). *One-dimensional Stable Distributions*, Volume 65 of Translations of mathematical monographs. American Mathematical Society. Translation from the original 1983 Russian edition.

Zolotarev, V. M. (1995). On representation of densities of stable laws by special functions. *Theory Probab. Appl. 39*, 354–362.

Zou, J., R. A. Davis, and G. Samorodnitsky (2020). Extreme value analysis without the largest values: what can be done? *Probability in the Engineering and Informational Sciences 34*(2), 200–220.

zu Castell, W. (2002). Recurrence relations for radial positive definite functions. *J. Math. Anal. Appl. 271*(1), 108–123.

Zuniga, F., T. J. Kozubowski, and A. K. Panorska (2021). A generalized linear model for multivariate events. *Journal of Computational and Applied Mathematics*, 113655.

Zweimüller, R. (2003). Stable limits for probability preserving maps with indifferent fixed points. *Stoch. Dyn. 3*(1), 83–99.

Zygmund, A. (1979). *Trigonometric Series*. Cambridge: Cambridge University Press. Volumes I,II.

Çakıroğlu, C. and G. Bekdaş (2022). Optimization of axial load carrying capacity of cfst stub columns. *Challenge Journal of Concrete Research Letters 13*(1), 1–4.