

Publications by Michael Sørensen:

In refereed Publications:

- [1] Normal variance-mean mixtures and z -distributions. Co-authors: O.E. Barndorff-Nielsen and J. Kent. *Internat. Statist. Review* **50**, 1982, 145–159.
- [2] On the relation between size and distance travelled for winddriven sand grains - results and discussion of a pilot experiment using coloured sand. Co-authors: O.E. Barndorff-Nielsen and J.L. Jensen. In B.M. Sumer and A. Müller (eds.): *Mechanics of Sediment Transport*, Balkema, Rotterdam, 1982, 55–64.
- [3] On the mathematical modelling of aeolian saltation. Co-author: J.L. Jensen. In B.M. Sumer and A. Müller (eds.): *Mechanics of Sediment Transport*, Balkema, Rotterdam, 1982, 65–72.
- [4] On maximum likelihood estimation in randomly stopped diffusion type processes. *Internat. Statist. Review* **51**, 1983, 93–110.
- [5] The fascination of sand. Co-authors: O.E. Barndorff-Nielsen, P. Blæsild and J.L. Jensen. In A.C. Atkinson and S.E. Fienberg (eds.): *A Celebration of Statistics*, Springer-Verlag, New York, 1985, 57–87.
- [6] The usefulness of tests for multivariate normality in physical anthropology. Co-author: J. Boldsen. *Ossa* **9-11**, 1985, 13–28.
- [7] Estimation of some aeolian saltation transport parameters: A reanalysis of Williams' data. Co-author: J.L. Jensen. *Sedimentology* **33**, 1986, 547–558.
- [8] On sequential maximum likelihood estimation for exponential families of stochastic processes. *Internat. Statist. Review* **54**, 1986, 191–210.
- [9] Classes of diffusion-type processes with a sufficient reduction. *Statistics* **17**, 1986, 585–596.
- [10] On the incubation time distribution and the Danish AIDS data. Co-authors: J.L. Boldsen, J.L. Jensen and J. Søgaaard. *J. R. Statist. Soc. A.* **151**, 1988, 42–43.
- [11] Exponential families of stochastic processes: A unifying semimartingale approach. Co-author: U. Küchler. *Internat. Statist. Review* **57**, 1989, 123–144.
- [12] Wind shear and hyperbolic distributions. Co-authors: O.E. Barndorff-Nielsen and J.L. Jensen. *Boundary-Layer Meteorology* **49**, 1989, 417–431.
- [13] A note on the existence of a consistent maximum likelihood estimator for diffusions with jumps. In Langer, H. and Nollau, V. (eds.): *Markov Processes and Control Theory*, Akademie-Verlag, Berlin, 1989, 229–234.
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- [15] On quasi likelihood for semimartingales. *Stoch. Processes Appl.* **35**, 1990, 331–346.
- [16] Parametric modelling of turbulence. Co-authors: O.E. Barndorff-Nielsen and J.L. Jensen. *Phil. Trans. R. Soc. Lond.* **A 332**, 1990, 439–455.
- [17] Likelihood methods for diffusions with jumps. In Prabhu, N.U. and Basawa, I.V. (eds.): *Statistical Inference in Stochastic Processes*, Marcel Dekker, New York, 1991, 67–105.
- [18] Information quantities in non-classical settings. Co-author: O.E. Barndorff-Nielsen. *Computational Statistics and Data Analysis* **12**, 1991, 143–158.
- [19] On the temporal-spatial variation of sediment size distributions. Co-author: O.E. Barndorff-Nielsen. *Acta Mechanica* [**Suppl**] **2**, 1991, 23–35.
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- [21] A review of recent progress in our understanding of aeolian sediment transport. Co-authors: R.S. Anderson and B.B. Willetts. *Acta Mechanica* [**Suppl**] **1**, 1991, 1–19.
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- [23] A statistical model for the streamwise component of a turbulent velocity field. Co-authors: O.E. Barndorff-Nielsen and J.L. Jensen. *Annales Geophysicae* **11**, 1993, 99–103.
- [24] Stochastic models of sand transport by wind and two related estimation problems. *Internat. Statist. Rev.* **61**, 1993, 245–255.
- [25] Exponential families of stochastic processes with time-continuous likelihood functions. Co-author: U. Küchler. *Scand. J. Statist.* **21**, 1994, 421–431.
- [26] Exponential families of stochastic processes and Lévy processes. Co-author: U. Küchler. *Journal of Statistical Planning and Inference* **39**, 1994, 211–237.
- [27] Statistical analysis of a spatial birth-and-death process model with a view to modelling linear dune fields. Co-author: J. Møller. *Scand. J. Statist.* **21**, 1994, 1–19.
- [28] A review of some aspects of asymptotic likelihood theory for stochastic processes. Co-author: O.E. Barndorff-Nielsen. *Int. Statist. Rev.* **62**, 1994, 133–165.
- [29] Martingale estimating functions for discretely observed diffusion processes. Co-author: B.M. Bibby. *Bernoulli* **1**, 1995, 17–39.
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- [36] A hyperbolic diffusion model for stock prices. Co-author: B.M. Bibby. *Finance and Stochastics* **1**, 1997, 25–41.
- [37] On the effect of time variability of the wind on rates of aeolian sand transport. *Aarhus Geoscience* **7**, 1997, 73–77.
- [38] Estimating functions for discretely observed diffusions: A review. In Basawa, I.V., Godambe, V.P. and Taylor, R.L. (eds.): *Selected Proceedings of the Symposium on Estimating Functions*. IMS Lecture Notes - Monograph Series, Vol. 32, 1997, 305–325.
- [39] On exponential families of Markov processes. Co-author: U. Küchler. *Journal of Statistical Planning and Inference* **66**, 1998, 3–19.
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- [41] Some stationary processes in discrete and continuous time. Co-authors: O.E. Barndorff-Nielsen and J.L. Jensen. *Adv. Appl. Prob.* **30**, 1998, 989 – 1007.
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- [43] Estimating equations based on eigenfunctions for a discretely observed diffusion process. Co-author: M. Kessler. *Bernoulli*, **5**, 1999, 299–314.
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- [50] Small-diffusion asymptotics for discretely sampled stochastic differential equations. Co-author: Masayuki Uchida. *Bernoulli*, **9**, 2003, 1051 – 1069.
- [51] On the rate of aeolian sand transport. *Geomorphology*, **59**, 2004, 53 – 62.
- [52] Estimation for discretely observed diffusions using transform functions. Co-authors: Leah Kelly and Eckhard Platen. *J. Appl. Prob.*, **41A**, 2004, 99 – 118.
- [53] Inference for observations of integrated diffusion processes. Co-author: S. Ditlevsen. *Scand. J. Statist.*, **31**, 2004, 417 – 429.
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- [59] Diffusion-type models with given marginal and autocorrelation function. Co-authors: Bo Martin Bibby and Ib Michael Skovgaard. *Bernoulli*, **11**, 2005, 191 – 220.
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- [61] Dynamics of particles in aeolian saltation. Co-author: Keld Rømer Rasmussen. In García-Rojo, R., Herrmann, H.J. and McNamara, S. (eds.): *Powders and Grains 2005*, Vol. 2, Balkema, Rotterdam, 2005, 967 – 972.
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- [66] Estimation for stochastic differential equations with a small diffusion coefficient. Co-author: Arnaud Gloter. *Stoch. Proc. Appl.*, **119**, 2009, 679 – 699.
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- [70] Maximum likelihood estimation for integrated diffusion processes. Co-author: Fernando Baltazar-Larios. In Chiarella, C. and Novikov, A. (eds.): *Contemporary Quantitative Finance: Essays in Honour of Eckhard Platen*, Springer, Heidelberg, 2010, 407 – 423.
- [71] Prediction-based estimating functions: review and new developments. *Brazilian Journal of Probability and Statistics*, **25**, 2011, 362 – 391.
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- [74] Review of the book “Semimartingales and Their Statistical Inference” by B.L.S. Prakasa Rao. *J. Amer. Statist. Ass.*, **95**, 2000, 1016 – 1017.
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- [76] Contribution to the discussion of the paper “Local model uncertainty and incomplete-data bias” by John Copas and Shinto Eguchi. *J. Roy. Statist. Soc., ser. B*, **67**, 2005, 500 – 501.

- [77] Comment: A selective overview of nonparametric methods in financial econometrics. *Statistical Science*, **20**, 2005, 344 – 346.

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- [79] Dehling, H.G., Mikosch, T. and Sørensen, M. (eds.) (2002): *Empirical Process Techniques for Dependent Data*. Birkhäuser, Boston.

Proceedings:

- [80] Huebner, M. and Sørensen, M. (eds.) (2001): *Mini-proceedings: Workshop on Stochastic Partial Differential Equation – Statistical Issues and Applications*. Centre for Mathematical Physics and Stochastics, Miscellanea No. 20.
- [81] Huebner, M. and Sørensen, M. (eds.) (2004): *Workshop on Dynamical Stochastic Modelling in Biology*. Network for Mathematical Physics and Stochastics, Miscellanea No. 26.

Other Publications:

- [82] The Hanstholm experiment 1982. Sand grain saltation on a beach. Co-authors: J.L. Jensen, K. Rømer Rasmussen and B.B. Willetts. Research Report 125, 1984, Department of Theoretical Statistics, University of Aarhus, 66 p.
- [83] Statistical analysis of the variation of the oxygen concentration in a river by means of diffusion processes. Co-author: M. Erlandsen. In L.S. Mortensen (ed.): *Applied Statistics Symposium*, January 1984, RECAU, Aarhus, 1984, 421–431.
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- [91] Radioactive tracer studies of grain progress in aeolian sand transport. A statistical analysis. Research Report 141, 1988, Department of Theoretical Statistics, University of Aarhus, 38 p.
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