

Publications

RESEARCH

1. Martin Friesen, Peng Jin, Jonas Kremer and Barbara Rüdiger, Ergodicity of affine processes on the cone of symmetric positive semidefinite matrices, submitted to an international journal, 2019.
2. Martin Friesen, Barbara Rüdiger and Padmanabhan Sundar, The Enskog process for hard and soft potentials, *NoDEA Nonlinear Differential Equations and Applications*, 26 (2019), no. 3, 26:20.
3. Martin Friesen, Peng Jin, Jonas Kremer and Barbara Rüdiger, Exponential ergodicity for stochastic equations of nonnegative processes with jumps, submitted to an international journal, 2019.
4. Martin Friesen, Peng Jin and Barbara Rüdiger, Boundary behavior of multi-type continuous-state branching processes with immigration, submitted to an international journal, 2019.
5. Martin Friesen, Peng Jin and Barbara Rüdiger, Stochastic equation and exponential ergodicity in Wasserstein distances for affine processes, submitted to an international journal, 2019.
6. Peng Jin, Jonas Kremer and Barbara Rüdiger, Existence of limiting distribution for affine processes, submitted to an international journal, 2018.
7. Martin Friesen, Peng Jin and Barbara Rüdiger, Existence of densities for stochastic differential equations driven by Lévy processes with anisotropic jumps, submitted to an international journal, 2018.
8. Martin Friesen, Peng Jin and Barbara Rüdiger, Existence of densities for multi-type CBI processes, submitted to an international journal, 2018.

9. Fred Espen Benth, Barbara Rüdiger and Andre Suess, Ornstein-Uhlenbeck processes in Hilbert space with non-Gaussian stochastic volatility, *Stochastic Processes and their Applications*, vol. 128(2) (2018), 461-486.
10. P. Jin, J. Kremer, B. Rüdiger, Moments and ergodicity of the jump-diffusion CIR process, to appear in *Stochastics* [arXiv:1709.00969].
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14. P. Jin, B.Rüdiger and C.Trabelsi, Exponential ergodicity of the jump-diffusion CIR process, *Proceedings of the conference "Stochastics of Environmental and Financial Economics"*, Center of Advanced Studies, Oslo 2014, Springer *Proceedings in Mathematics & Statistics* 2016, Springer Verlag.
15. Peng Jin, Barbara Rüdiger and Chiraz Trabelsi, "Positive Harris recurrence and exponential ergodicity of the basic affine jump-diffusion" pages 75-95 *Stochastic Analysis and Applications* Volume 34, Issue 1, 2016.
16. Fernando, B., Rüdiger, B., Sritharan, S., Mild Solutions of Stochastic Navier-Stokes Equation with Jump Noise in L^p -spaces, *Mathematische Nachrichten*, vol.288, Issue 14-15, May (2015).
17. B. Hakwa, M. Jäger-Ambrozewicz, B. Rüdiger; Analysing Systemic Risk Contribution Using A Closed Formula For Conditional Value at Risk Through Copula, *Comm. on Stoch.. An .* vol. 9, no. 1 (March 2015).
18. P. Jin, V. Mandrekar, B.Rüdiger and C.Trabelsi; Positive Harris recurrence of the CIR process and its applications, *Comm. on Stoch.. An .* vol. 7, no. 3 (September 2013).

19. B. Rüdiger, S. Tappe; Isomorphisms for spaces of predictable processes and an extension of the Ito integral. *Stoch. Anal. Appl.* 30 (2012), no. 3, 529-537.
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42. B. Rüdiger; Flux limited Diffusion Equations; comparison of results” Compte -Rendus du Seminaire de Mathématiques de l’Université de Rouen 92/93 (Ed C. Dellacherie et al.).

TESI DI LAUREA

- B. Rüdiger, Moto uni -dimensionale di una particella soggetta a collisioni elastiche, Dipartimento di Mathematica, Università di Roma ”La Sapienza” (1989).

Ph.D

- B. Rüdiger, Derivazione microscopica di equazioni stocastiche non lineari. Fluttuazioni critiche per modelli di spin di tipo campo medio. Università di Roma ”Tor Vergata” (1996).

IN PREPERATION

- S. Albeverio, A. De Masi, E. Presutti, B. Rüdiger; Time dependent critical fluctuations of a two-dimensional local mean field model.
- P. Jin, V. Mandrekar, B. Rüdiger, C. Trabelsi; Some Remarks About Debeka’s Credit Model.