

## Ergänzende Literatur zur Vorlesung Stochastische Prozesse

- [1] N. Van Kampen, Stochastic Processes in Physics and Chemistry, revised Edition, Elsevier Science 2001.
- [2] C. W. Gardiner, Handbook of Stochastic Methods, 3rd Edition Springer 2004.
- [3] J. Honerkamp, Stochastische Dynamische Systeme, VCH, Weinheim 1990; Stochastic Dynamical Systems, Wiley 1993.
- [4] P. E. Kloeden, E. Platen, Numerical Solution of Stochastic Differential Equations, 2nd (revised) Edition, Springer, Berlin 1999.
- [5] W. Paul, J. Baschnagel, Stochastic Processes, From Physics to Finance, Springer, Berlin 2000.
- [6] M. Lax, W. Cai, M. Xu, Random Processes in Physics and Finance, Oxford University Press, Oxford 2006.
- [7] W. Horsthemke, R. Lefever, Noise Induced Transitions, Springer 1984.
- [8] D. Sornette, Critical Phenomena in Natural Sciences, 2nd Ed., Springer, Berlin 2006.
- [9] A. Papoulis, Probability, Random Variables and Stochastic Processes, McGraw-Hill, New York 1965.
- [10] Yu. V. Prohorov, Yu. A. Rozanov, Probability Theory, Springer, Berlin 1969.
- [11] W. Feller, An Introduction to Probability Theory and its Applications, Volume II, 2nd Edition, Wiley, New York 1971.
- [12] H. Risken, The Fokker-Planck Equation, 2nd Edition, Springer, Berlin 1989.
- [13] S. M. Ross, Stochastic Processes, 2nd Edition, Wiley, New York 1996.
- [14] J. G. Kemeny, J. L. Snell, Finite Markov Chains, Van Nostrand Co., Princeton 1960.
- [15] J. G. Kemeny, J. L. Snell, A. W. Knapp, Denumerable Markov Chains, Springer, New York 1976.
- [16] H. Haken, Synergetik, 3. erw. Aufl., Springer, Berlin 1990.
- [17] I. I. Gikhman, A. V. Skorochod, Introduction to the Theory of Random Processes, Dover Publications 1996.
- [18] V. I. Tikhonov, M. A. Mironov, Markovian Processes, Sov. Radio, Moscow, 1977 (in Russian).
- [19] P. Lévy, Processus stochastiques et mouvement Brownien, 2nd ed. Paris: Gauthier-Villars, 1965.
- [20] B. V. Gnedenko, A. N. Kolmogorov, Limit Distributions for Sums of Independent Random Variables, Addison-Wesley, Reading, MA. 1968.
- [21] R. P. Feynman, A.R. Hibbs, Quantum mechanics and path integrals McGraw-Hill, New York 1965.

- [22] B. J. West, W. Deering, Fractal physiology for physicists: Lévy statistics, *Phys. Rep.* **246**, 1-100 (1994); R. Metzler, J. Klafter, The random walks guide to anomalous diffusion: a fractional dynamics approach, *Phys. Rep.* **339**, 1-77 (2000); R. Metzler, J. Klafter, The restaurant at the end of the random walk: recent developments in the description of anomalous transport by fractional dynamics, *J. Phys A* **37**, R161-R208 (2004); E. Scalas, R. Gorenflo, F. Mainardi, Fractional calculus and continuous-time finance, *Physica A* **284**, 376 (2000); A. A. Kilbas, T. Pierantozzi, J. J. Trujillo, L. Vasquez, On the solution of fractional evolution equations, *J. Phys A* **37**, 3271-3283 (2004).
- [23] R. Herrmann, *Fractional Calculus*, World Scientific, Singapore 2011.
- [24] V. E. Shapiro, V. M. Loginov, *Dynamical Systems under Random Influences*, Nauka, Novosibirsk, 1983 (in Russian).
- [25] J. García-Ojalvo, J. M. Sancho, *Noise in Spatially Extended Systems*, Springer, New York 1999.
- [26] C. Van den Broeck, J. M. R. Parrondo, R. Toral, Noise-Induced Nonequilibrium Phase Transition, *Phys. Rev. Lett.* **73**, 3395 (1994); R. Müller, K. Lippert, A. Kühnel, U. Behn, First order nonequilibrium phase transition in a spatially extended system, *Phys. Rev. E* **56**, 2658 (1997); T. Birner, K. Lippert, R. Müller, A. Kühnel, U. Behn, Critical behaviour of non-equilibrium phase transitions to magnetically ordered states, *Phys. Rev. E* **65**, 046110 (2002).
- [27] R. Benzi, A. Sutera, A. Vulpiani, The mechanism of Stochastic Resonance, *J. Phys. A* **14**, L453 (1981); C. Nicolis, Stochastic aspects of climatic transitions - response to a periodic forcing, *Tellus* **34**, 1 (1982); B. McNamara, K. Wiesenfeld, Theory of Stochastic Resonance, *Phys. Rev. A* **39**, 4854 (1989); L. Gammaitoni, P. Hänggi, P. Jung, F. Marchesoni, Stochastic Resonance, *Rev. Mod. Phys.* **70**, 223 (1998); B. Lindner, J. García-Ojalvo, A. Neiman and L. Schimansky-Geier, Effects of noise in excitable systems, *Phys. Rep.* **392**, 321 (2004).
- [28] Feynman Lectures I, ch. 46 (1966); R. Landauer, Inadequacy of entropy and entropy derivatives in characterizing the steady state, *Phys. Rev. A* **12**, 636 (1975); R. Landauer, *J. Stat. Phys.* **53**, 233 (1988); M.O. Magnasco, Forced thermal ratchets, *Phys. Rev. Lett.* **71**, 1477 (1993).
- [29] J. F. Heagy, N. Platt, S. M. Hammel, Characterization of on-off intermittency, *Phys. Rev. E* **49**, 1140 (1994);
- [30] H. Touchette, The large deviation approach to statistical mechanics, *Phys. Reports* **478**, 1 (2009).

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