References

[1] H. Allouba, *Brownian-time processes: The pde connection and the corresponding Feynman-Kac formula,* Trans. Amer. Math. Soc. 354 (2002), no.11 4627 - 4637.

[2] H. Allouba and W. Zheng, *Brownian-time processes: The pde connection and the half-derivative generator,* Ann. Prob. 29 (2001), no. 2, 1780-1795.

[3] D. Applebaum (2004) *Lévy Processes and Stochastic Calculus.* Cambridge studies in advanced mathematics.

[4] W. Arendt, C. Batty, M. Hieber, and F. Neubrander, *Vector-valued Laplace transforms and Cauchy problems.* Monographs in Mathematics, Birkhäuser-Verlag, Berlin (2001).

[5] L.J.B. Bachelier (1900) *Théorie de la Spéculation.* Gauthier-Villars, Paris.

[6] E.G. Bajlekova, *Fractional evolution equations in Banach spaces*, Ph.D. thesis, Eindhoven University of Technology, 2001.

[7] M.T. Barlow (1990) Random walks and diffusion on fractals. In *Proceedings of the Internatioal Congress of Mathematicians, Kyoto, Japan* **2**, 1025–1035. Springer-Verlag.

[8] M.T. Barlow and R.F. Bass (1993) Coupling and Harnack inequalities for Sierpiński carpets. *Bull. Amer. Math. Soc.* **29** 208–212.

[9] M.T. Barlow and E.A. Perkins (1988) Brownian motion on the Sierpiński carpet. *Probab. Theory Rel. Fields* **79** 543–623.

[10] B. Baeumer and M.M. Meerschaert, *Stochastic solutions for fractional Cauchy problems,* Fractional Calculus Appl. Anal. 4 (2001), 481-500.

[11] R. Bañuelos and R.D. DeBlassie (2006), The exit distribution for iterated Brownian motion in cones. *Stochastic Processes and their Applications* **116** no. 1, 36–69.

[12] P. Becker-Kern, M.M. Meerschaert and H.P. Scheffler (2004) Limit theorems for coupled continuous time random walks. *The Annals of Probability* **32**, No. 1B, 730–756.

[13] D. Benson, S. Wheatcraft and M. Meerschaert (2000) Application of a fractional advection-dispersion equation. *Water Resour. Res.* **36**, 1403–1412.

[14] D. Benson, S. Wheatcraft and M. Meerschaert (2000) The fractional-order governing equation of Lévy motion, *Water Resources Research* **36**, 1413–1424.

[15] D. Benson, R. Schumer, M. Meerschaert and S. Wheatcraft (2001) Fractional dispersion, Lévy motions, and the MADE tracer tests. *Transport in Porous Media* **42**, 211–240.

[16] J. Bertoin (1996) *Lévy processes.* Cambridge University Press.

[17] J. Bisquert (2003) Fractional Diffusion in the Multiple-Trapping Regime and Revision of the Equivalence with the Continuous-Time Random Walk. *Physical Review Letters* **91**, No. 1, 602–605.

[18] K. Burdzy, *Some path properties of iterated Brownian motion,* In Seminar on Stochastic Processes (E. Çinlar, K.L. Chung and M.J. Sharpe, eds.), Birkhäuser, Boston, (1993), 67-87.

[19] K. Burdzy, *Variation of iterated Brownian motion,* In Workshops and Conference on Measure-valued Processes, Stochastic Partial Differential Equations and Interacting Particle Systems (D.A. Dawson, ed.) Amer. Math. Soc. Providence, RI, (1994),35-53.

[20] K. Burdzy and D. Khoshnevisan, *The level set of iterated Brownian motion,* Séminarie de probabilités XXIX (Eds.: J Azéma, M. Emery, P.-A. Meyer and M. Yor), Lecture Notes in Mathematics, 1613, Springer, Berlin, (1995), 231-236.

[21] K. Burdzy and D. Khoshnevisan, *Brownian motion in a Brownian crack,* Ann. Appl. Probabl. 8 (1998), no. 3, 708-748.

[22] E. Csáki, M. Csörgö, A. Földes, and P. Révész, *The local time of iterated Brownian motion,* J. Theoret. Probab. 9 (1996), 717-743.

[23] R. D. DeBlassie, *Iterated Brownian motion in an open set,* Ann. Appl. Prob. 14 (2004), no. 3, 1529-1558.

[24] A. Einstein (1956) *Investigations on the theory of Brownian movement.* Dover, New York.

[25] L.R.G. Fontes, M. Isope and C.M. Newman (2002) Random walks with strongly inhomogeneous rates and singular diffusions: Convergence, localization, and aging in one dimension. *Ann. Probab.* **30**, No. 2, 579-604.

[26] T. Funaki, *A probabilistic construction of the solution of some higher order parabolic differential equations,* Proc. Japan Acad. Ser. A. Math. Sci. 55 (1979), no. 5, 176-179.

[27] R. Gorenflo, F. Mainardi, E. Scalas and M. Raberto (2001) Fractional calculus and continuous-time finance. III. The diffusion limit. Mathematical finance (Konstanz, 2000), 171–180, *Trends Math.*, Birkhuser, Basel.

[28] E. Hille and R.S. Phillips (1957) *Functional Analysis and Semi-Groups.* Amer. Math. Soc. Coll. Publ. **31**, American Mathematical Society, Providence.

[29] Y. Hu, *Hausdorff and packing measures of the level sets of iterated Brownian motion.* J. Theoret. Probab. 12 (1999), no. 2, 313-346.

[30] Y. Hu., D. Pierre-Loti-Viaud, and Z. Shi, *Laws of iterated logarithm for iterated Wiener proceses*, J. Theoret. Probabl. 8 (1995), 303-319.

[31] N. Jacob (1996) *Pseudo-Differential Operators and Markov Processes.* Berlin : Akad. Verl.

[32] N. Jacob (1998) Characteristic functions and symbols in the theory of Feller processes. *Potential Anal.* **8**, no. 1, 61–68.

[33] N. Jacob and R. Schilling (2001) Lévy-type processes and pseudodifferential operators. *Lévy processes*, 139–168, Birkhäuser, Boston, MA.

[34] Z. Jurek and J.D. Mason (1993) *Operator-Limit Distributions in Probability Theory.* Wiley, New York.

[35] D. Khoshnevisan and T.M. Lewis, *Stochastic calculus for Brownian motion in a Brownian fracture,* Ann. Applied Probabl. 9 (1999), no. 3, 629-667.

[36] D. Khoshnevisan and T.M. Lewis, *Chung's law of the iterated logarithm for iterated Brownian motion,* Ann. Inst. H. Poincaré Probab. Statist. 32 (1996), no. 3, 349-359.

[37] M.M. Meerschaert and H.P. Scheffler (2001) *Limit Distributions for Sums of Independent Random Vectors: Heavy Tails in Theory and Practice.* Wiley Interscience, New York.

[38] M.M. Meerschaert, D.A. Benson, H.P. Scheffler and B. Baeumer (2002) Stochastic solution of space-time fractional diffusion equations. *Phys. Rev. E* **65**, 1103–1106.

[39] M.M. Meerschaert, D.A. Benson, H.P. Scheffler and P. Becker-Kern (2002) Governing equations and solutions of anomalous random walk limits. *Phys. Rev. E* **66**, 102R-105R.

[40] M.M. Meerschaert and H.P. Scheffler (2004) Limit theorems for continuous time random walks with infinite mean waiting times. *J. Applied Probab.* **41**, No. 3, 623–638.

[41] M.M. Meerschaert and H.P. Scheffler (2006) Stochastic model for ultraslow diffusion. *Stoch. Proc. Appl.*, **116**, No. 9, 1215–1235.

[42] M.M. Meerschaert and E. Scalas (2006) Coupled continuous time random walks in finance. *Physica A*, **370**, 114–118.

[43] R. Metzler and J. Klafter (2000) The random walk's guide to anomalous diffusion: A fractional dynamics approach. *Phys. Rep.* **339**, 1–77.

[44] R. Metzler and J. Klafter (2004) The restaurant at the end of the random walk: recent developments in the description of anomalous transport by fractional dynamics. *J. Physics A* **37**, R161-R208.

[45] E. Nane, *Iterated Brownian motion in parabola-shaped domains,* Potential Analysis, 24 (2006), 105-123.

[46] E. Nane, *Iterated Brownian motion in bounded domains in* $\mathbb{R}^n$*,* Stochastic Processes and Their Applications, 116 (2006), 905-916.

[47] E. Nane, *Higher order PDE's and iterated processes*, Transactions of American Mathematical Society (to appear).

[48] E. Nane, *Laws of the iterated logarithm for α-time Brownian motion*, Electron. J. Probab. 11 (2006), no. 18, 434–459 (electronic).

[49] E. Nane, *Isoperimetric-type inequalities for iterated Brownian motion in* $\mathbb{R}^n$, Submitted, math.PR/0602188.

[50] E. Nane, *Lifetime asymptotics of iterated Brownian motion in* $\mathbb{R}^n$*,* Esaim:PS (to appear).

[51] E. Orsingher and L. Beghin (2004) Time-fractional telegraph equations and telegraph processes with Brownian time. *Prob. Theory Rel. Fields* **128**, 141–160.

[52] A. Pazy (1983) *Semigroups of Linear Operators and Applications to Partial Differential equations.* Applied Mathematical Sciences **44**, Springer-Verlag, New York.

[53] T. Prosen and M. Znidaric (2001) Anomalous diffusion and dynamical localization in polygonal billiards. *Phys. Rev. Lett.* **87**, 114101–114104.

[54] W. Rudin (1973) Functional Analysis. 2nd Edition, McGraw-Hill, New York.

[55] G. Samorodnitsky and M. Taqqu, *Stable non-Gaussian Random processes,* Chapman and Hall, New york (1994).

[56] K.I. Sato (1999) *Lévy Processes and Infinitely Divisible Distributions.* Cambridge University Press.

[57] E. Scalas (2004) Five years of Continuous-Time Random Walks in Econophysics. *Proceedings of WEHIA 2004*, A. Namatame (ed.), Kyoto.

[58] Schilling, R.L.: Growth and Hölder conditions for sample paths of Feller proceses. Probability Theory and Related Fields **112**, 565–611 (1998)

[59] R. Schumer, D.A. Benson, M.M. Meerschaert and S. W. Wheatcraft (2001) Eulerian derivation of the fractional advection-dispersion equation. *J. Contaminant Hydrol.*, **48**, 69–88.

[60] Z. Shi and M. Yor, *Integrability and lower limits of the local time of iterated Brownian motion,* Studia Sci. Math. Hungar. 33 (1997), no. 1-3, 279-298.

[61] M. Shlesinger, J. Klafter and Y.M. Wong (1982) Random walks with infinite spatial and temporal moments. *J. Statist. Phys.* **27**, 499–512.

[62] Y.G. Sinai (1982) The limiting behavior of a one-dimensional random walk in a random medium. *Theor. Probab. Appl.* **27**, 256–268.

[63] I.M. Sokolov and J. Klafter (2005) From Diffusion to Anomalous Diffusion: A Century after Einstein's Brownian Motion. *Chaos* **15**, 6103–6109.

[64] Y. Xiao, *Local times and related properties of multi-dimensional iterated Brownian motion,* J. Theoret. Probab. 11 (1998), no. 2, 383-408.

[65] G. Zaslavsky, *Fractional kinetic equation for Hamiltonian chaos. Chaotic advection, tracer dynamics and turbulent dispersion.* Phys. D 76 (1994), 110-122.