LIST OF PUBLICATIONS/ Paavo Salminen

1. Papers in international journals/refereed

1. Martin-boundaries for some space-time Markov processes. *Z. Wahrscheinlichkeitstheorie und verw. Gebiete*, Vol. 55, p.41-53 (1981).
2. Mixing Markovian laws; with an application to path decompositions. *Stochastics*, Vol. 9, p. 223-231 (1983).
3. One-dimensional diffusions and their exit spaces. *Math. Scand.*, Vol. 54, p. 209-220 (1984).
4. Optimal stopping of one-dimensional diffusions. *Mathematische Nachrichten*, Vol. 124, p. 85-101 (1985).
5. On conditional Ornstein-Uhlenbeck processes. *Advances in Applied Probability*, Vol. 16, p. 920-922 (1984).
6. On the joint distribution of the maximum and its location for a linear diffusion. (Joint work with E. Csaki and A. Földes). *Annales de l'Institute de Henri Poincare - Probabilites et Statistiques,* Vol. 23, p. 179 -194 (1987).
7. On the first hitting time and the last exit time for a Brownian motion to/ from a moving boundary. *Advances in Applied Probability,* Vol. 20, p. 411-426 (1988).
8. On multiplicative excessive functions of a branching Brownian motion. *Probability Theory and Related Fields*, Vol. 85, p. 43-56 (1990).
9. Cutting Markovian trees. *Annales Academiae Scientiarum Fennicae, Series A.I. Mathematica*, Vol. 17, p. 123-137 (1992).
10. A ratio limit theorem for erased branching Brownian motion. *Stochastic Processes and their Applications*, Vol. 41, p. 215-222 (1992).
11. On a first passage problem for branching Brownian motions. (Joint work with I. Kaj). *Annals of Applied Probability*, Vol. 3(1), p. 173-185 (1992).
12. On the distribution of supremum of diffusion local time. *Statistics and Probability Letters,* Vol. 18, p. 219-225 (1993).
13. On the ultimate value of local time of one-dimensional super-Brownian motion. (Joint work with Ingemar Kaj). *Stochastic processes and their applications,* Vol. 59, p. 21-42 (1995).
14. On additive functionals of diffusion processes. (Joint work with Endre Csaki). *Studia Sci. Math. Hung.,* Vol. 31, p. 47-62 (1996).
15. On last exit decompositions of linear diffusions. *Studia Sci. Math. Hung.,* Vol. 33, p. 251-262 (1997).
16. Optimal stopping and American put options. *Theory of Stochastic Processes* Vol. 5 (1-2), p. 129-144 (1999)
17. On Russian options. *Theory of Stochastic Processes* Vol. 6 (3-4), p. 161-176 (2000)
18. On busy periods of the unbounded Brownian storage. (Joint work with Ilkka Norros). *Queueing Systems,* Vol. 39, p. 317-333, (2001)
19. A storage process with local time input. (Joint work with Petteri Mannersalo and Ilkka Norros). *Queueing Systems,* Vol. 46, p. 557-577, (2004)

20. Properties of perpetual integral functionals of Brownian motion with drift. (Joint work with Marc Yor). *Annales de l'Institute de Henri Poincare - Probabilites et Statistiques,* Vol. 41, p. 335-347 (2005). Prepublication PMA-845. (http://www.proba.jussieu.fr/publi.html).

21. On first range times of linear diffusions. (Joint work with Pierre Vallois). *Journal of Theoretical probability,* Vol. 18(3), p. 567-593 (2005). Prepublication de l'IECN 2003/22. (http://www.iecn.u-nancy.fr/Preprint/publis/index.html)

22. On some exponential integral functionals of BM(μ) and Bes(3). (Joint work with Andrei Borodin). *Zap. Nauchn. Semin. POMI*, Vol. 311, p. 51-78 (2004). Translated in *J. Math. Sciences*, Vol. 133(3), p. 1231-1248.

23. Diffusion local time storage. (Joint work with Marina Kozlova). *Stochastic Processes and their Applications*, Vol. 114, p. 211-229 (2004).

24. Perpetual integral functionals as hitting and occupation times. (Joint work with Marc Yor). *Electr. J. Probab.*, Vol. 10, p. 371-419 (2005).

25. On an occupation time identity for reflecting Brownian motion with drift. (Joint work with Marina Kozlova). *Periodica Math. Hung.*, Vol. 51(1-2), p. 189-198 (2005).

26. On occupation times of stationary diffusions. (Joint work with Marina Kozlova). *Electr. Comm. Probab.*, Vol. 10, p. 94-104 (2005).

27. A note on a.s. finiteness of perpetual integral functionals of diffusions. (Joint work with Davar Khoshnevisan and Marc Yor). *Electr. Comm. Probab.*, Vol. 11, p. 108-117 (2006).

28. On maximal increase and decrease for Brownian motion. (Joint work with Pierre Vallois). *Ann. Inst. Henri Poincaré, Probabilités et Statistiques* Vol. 43, p. 655-676 (2007).

29. On optimal stopping of Hunt and Lévy processes. (Joint work with Ernesto Mordecki). *Stochastics: An International Journal of Probability and Stochastic Processes*, Vol. 79(3-4), p. 233-251 (2007).

30. On excursion theory of linear diffusions. (Joint work with Pierre Vallois and Marc Yor). *Japanese Journal of Mathematics*, Vol. 2, p. 97-127 (2007).

31. Analysis of stochastic fluid queues driven by local time processes. (Joint work with Takis Konstantopoulus, Andreas Kyprianou, and Marina Sirviö). *Advances of Applied Probability*, Vol 40, p. 1072-1103 (2008).

32. On subexponentiality of the Lévy measure of the diffusion inverse local time; with applications to penalizations. (Joint work with Pierre Vallois). *Electr. J. Probab.*, Vol. 14, p. 1963-1991 (2009).

33. On hitting times of affine boundaries by reflecting Brownian motion and Bessel processes.(Joint work with Marc Yor). *Periodica Math. Hungar.*, Vol. 62(1), p. 75-101 (2011).

34. On fractional Ornstein-Uhlenbeck processes. (Joint work with Terhi Kaarakka). *Communications on Stochastic Analysis*, Vol. 5(1), p. 121-133 (2011).

35. Optimal stopping, Appell polynomials and Wiener-Hopf factorization. *Stochastics: An International Journal of Probability and Stochastic Processes* (to appear).

36. On the excursions of reflected local time processes and stochastic fluid queues. (Joint work with Takis Konstantopoulus and Andreas Kyprianou). *Journal of Applied Probability*, Spec. Vol. 48A, 2011 (to appear).

2. Papers in international proceedings/refereed

1. Optimal stopping of one-dimensional diffusions. *Trans. 9th Prague Conference on Information Theory, Statistical Decision Functions and Random Processes*, p. 163-168. Academia, Prague (1983).

2. Brownian excursions, revisited. *Seminar on Stochastic Processes, 1983*, eds. E.Çinlar, K.L. Chung, R.K. Getoor. p. 161-187. Birkhäuser (1984).
3. On local times of a diffusion. *Séminaire de Probabilité, XIX*, eds. J. Azema, M. Yor. *LN in Mathematics,* Vol. 1123 p. 68-79. Springer Verlag (1985).
4. On spectral measures of strings and excursions of quasi diffusions. (Joint work with U. Küchler). *Séminaire de Probabilité, XXIII,* eds. J. Azéma, P. Meyer, M. Yor. *LN in Mathematics,* Vol. 1372, p. 490-502. Springer Verlag (1989).
5. On the joint distribution of the Brownian local and occupation times. *Proc. of the fifth IFIP Working Conference on Stochastic Differential Systems,* eds. H.J. Engelbert, W. Schmidt. *LN in Control and Information Sciences,* Vol. 96, p. 213 - 217. Springer Verlag (1987).
6. On functionals of branching Brownian motions. (Joint work with A.N. Borodin). *Frontiers in Pure and Applied Probability,* Proceedings of the Third Finnish-Sovjet Symposium on Probability Theory and Mathematical Statistics, eds. H. Niemi, G. Högnäs, A.N. Shiryayev, A.V. Melnikov, Vol. 1, p. 7-21. VSP BV/ TVP Science Publishers, Moscow (1993).
7. A note on first passages in branching Brownian motions. (Joint work with I. Kaj). *Frontiers in Pure and Applied Probability,* Proceedings of the Third Finnish-Sovjet Symposium on Probability Theory and Mathematical Statistics, eds. H. Niemi, G. Högnäs, A.N. Shiryayev, A.V. Melnikov, Vol. 1, p. 95-102. VSP BV/ TVP Science Publishers, Moscow (1993).
8. A pointwise limit theorem for the transition density of a linear diffusion. *Frontiers in Pure and Applied Probability,* Proceedings of the Fourth Finnish-Sovjet Symposium on Probability Theory and Mathematical Statistics, eds. H. Niemi, E. Valkeila, A.N. Shiryayev, A.V. Melnikov, Vol. 8, p. 171-176. VSP BV/ TVP Science Publishers, Moscow (1996).
9. Discussion paper in IPM 35: Recent advances in probability. *Bulletin of ISI: Proceedings of the 52nd Session* Tome LVIII, Book 3, p. 131-132. International Statistical Institute, Helsinki (1999).
10. Brownian local time. *Encyclopaedia of Mathematics, Supplement II,* ed. M. Hazewinkel, p. 94-95. Kluwer Academic Publishers, Dordrecht (2000).
11. Brownian motion. *Encyclopedia of Acturial Sciences,* ed. Teugels and Sundt, Vol 1, p. 204-209. John Wiley & Sons, Ltd, Chichester (2004)
12. On Dufresne's perpetuity, translated and reflected. (Joint work with Marc Yor). Proceedings of the Ritsumeikan International Symposium 5-9 March 2003: Stochastic Processes and Applications to Mathematical Finance. Ed. Akahori, Ogawa, and Watanabe, p. 337-354. World Scientific 2004. Prepublication PMA-858. (http://www.proba.jussieu.fr/publi.html).
13. On Tanaka's formula for symmetric Lévy processes. (Joint work with Marc Yor). *Séminaire de Probabilité, XL*, eds. C. Donati-Martin, M. Émery, A. Roualt, C. Stricker. *LN in Mathematics,* Vol. 1899 p. 265-286. Springer Verlag (2007). (Prepublication PMA-957, http://www.proba.jussieu.fr/publi.html).
14. Perpetual integral functionals of diffusions and their numerical computations. (Joint work with Olli Wallin). *Proceedings of the Abel Symposium 2005 - Stochastic Analysis and Applications - Symposium in Honor of Kiyoshi Itô*, eds. F.E. Benth, G. Di Nunno, T. Lindström, B. OEksendal, T. Zhang. p. 569-594. Springer Verlag (2007).

3. Monographs

1. Handbook of Brownian Motion – Facts and Formulae. Birkhauser Verlag, Basel-Boston-Berlin (1996), p. 462 . (Joint work with A.N. Borodin).
2. Spravocnik po brounovskomy dvizeniy - fakty i formuly. Lan publishers, St. Petersburg, (2000). (Joint work with A.N. Borodin). (Extended Russian translation of Handbook of Brownian Motion – Facts

and Formulae. Birkhauser Verlag, Basel-Boston-Berlin (1996)).

3. Handbook of Brownian Motion – Facts and Formulae, 2nd edition. Birkhauser Verlag, Basel-Boston-Berlin (2002), p. 672. (Joint work with A.N. Borodin).

4. Other publications and preprints

1. Martin-boundaries for some space-time Markov processes. Preprint No. 31, 1978/ 79 *Aarhus Universitet, Matematisk Institut.* 22 p.
2. The 3-dimensional Bessel process and Brownian motion. *Acta Academiae Aboensis, Ser. B*, Vol. 40, No. 7, (1980). 8 p.
3. One-dimensional diffusions and their duals. *Acta Academiae Aboensis, Ser. B*, Vol. 41, No. 5, (1981). 16 p.
4. A class of non-time-homogeneous diffusions with the $2M-X$-property. *Rapporter från Åbo Akademi. Informationsbehandling & Matematik,* Ser. A, No. 15 (1981). 15 p.
5. A Poisson process with predictable jump times. *Rapporter från Åbo Akademi. Informationsbehandling & Matematik,* Ser. A, No. 28 (1983). 3 p.
6. ϵ-optimal stopping of one-dimensional transient diffusions. *Acta Academiae Aboensis, Ser. B*, Vol. 44, No. 2, (1984). 9 p.
7. On excessive measures and functions of symmetric Markov processes - especially linear diffusions. *Rapporter från Åbo Akademi. Informationsbehandling & Matematik,* Ser. A, No. 41 (1985). 29 p.
8. Wiener prosessin mikroskooppisesta rakenteesta. *Matemaatikkopäivät Turussa 1986. Esitelminen lyhennelmät.* Toim. R. Ernvall p. 51-53. Turun Yliopiston offsetpaino (1986).
9. On the distribution of the first hitting time of a Brownian motion to a parabola. (Joint work with P. Groeneboom.) Preprint (1987). 8 p.
10. On local times of a diffusion. Abstracts of the 14th conference on stochastic processes and their applications. *Stochastic Processes and Their Applications,* Vol. 19, p. 24 (1985).
11. On the distribution of first passages in branching Brownian motions. Preprint No. 140 (1992), *Institute for Applied Mathematics, University of Turku.* 12 p.
12. Decomposing a diffusion at the minimum of $\mu t - \ell_t$. (Joint work with Paul McGill and John Walsh). Preprint. 10 p (1996).
13. Matemaattisen rahoitusteorian peruselementti: Black-Scholesin kaava. (Joint work with E. Valkeila.) *Arkimedes*, 3/1999.
14. Linear diffusions – a survey. (Joint work with Marina Kozlova). Under preparation for *Surveys in Probability* 2007.