# Publications of

Søren Asmussen[1]

1. Convergence rates for branching processes. *Ann. Probab.* **4**, 139-146 (1976).
2. (with N. Kaplan) Branching random walks I. *Stoch. Proc. Appl.* **4**, 1-13 (1976).
3. (with N. Kaplan) Branching random walks II. *Stoch. Proc. Appl.* **4**, 15-31 (1976).
4. (with H. Hering) Strong limit theorems for general supercritical branching processes with applications to branching diffusions. *Z. Wahrscheinlichkeitsth. verw. Geb.* **36**, 195-212 (1976).
5. (with H. Hering) Strong limit theorems for supercritical immigration-branching processes. *Math. Scand.* **39**, 327-342 (1976).
6. Almost sure behaviour of linear functionals of supercritical branching processes (23 pp.). Preprint **4/1976**, Institute of Mathematical Statistics, University of Copenhagen.
7. Some martingale methods in the limit theory of supercritical branching processes. *Branching Processes* (A. Joffe & P. Ney, eds.). Advances in Probability and Related Topics **5**, 1-26 (1978).
8. Almost sure behaviour of linear functionals of supercritical branching processes. *Trans. Amer. Math. Soc.* **231**, 233-248 (1977).
9. (with H. Hering) Some modified branching diffusion models. *Math. Biosci.* **35**, 281-299.
10. (with N. Keiding) Martingale central limit theorems and asymptotic estimation theory for multitype branching processes. *Adv. Appl. Probab.* **10**, 109-129 (1978).
11. (with T.G. Kurtz) Necessary and sufficient conditions for complete convergence in the law of large numbers. *Ann. Probab.* **8**, 176-182 (1980).
12. On some two-sex population models. *Ann. Probab.* **8**, 727-744 (1980).
13. (with H. Hering) *Branching Processes*. Birkhaüser, Boston Basel Stuttgart (1983).
14. Equilibrium properties of the M/G/l queue. *Z. Wahrscheinlichkeitsth. verw. Geb.* **58**, 267-281 (1981).
15. Conditioned limit theorems relating a random walk to its associate, with applications to risk reserve processes and the GI/G/1 queue. *Adv. Appl. Probab.* **14**, 143-170 (1982).
16. On the role of a certain eigenvalue in estimating the growth rate of a branching process. *Austr. J. Statist.* **24**, 151-159 (1982).
17. Time-dependent approximations in some queueing systems with imbedded Markov chains related to random walks. Preprint **6/1981**, Institute of Mathematical Statistics, University of Copenhagen.
18. Contributions to the Theory of Branching Processes (13 pp.). Dissertation for the degree of Dr. scient., Institute of Mathematical Statistics, University of Copenhagen (1982).
19. (with D. Edwards) Collapsibility and response variables in contingency tables. *Biometrika* **70,** 567-578 (1983).
20. Approximations for the probability of ruin within finite time. *Scand. Act. J.* **1984**, 31-57 (1984); ibid. **1985**, 57 (1985).
21. Conjugate processes and the simulation of ruin problems. *Stoch. Proc. Appl.* **20**, 213-229 (1985).
22. *Applied Probability and Queues*. John Wiley and Sons, Chichester New York Brisbane Toronto Singapore (1987).

[1]Last update: December 16, 2011.

23. (with H. Thorisson) Large deviation results for time-dependent queue length probabilities. *Stochastic Models* **4**, 99-116 (1988).
24. (with H. Johansen) Über eine Stetigkeitsfrage betreffend das Bedienungssystem GI/G/s. *Elektron. Inf. Kyb. EIK* **22**, 565-570 (1986).
25. (with H. Thorisson) A Markov chain approach to periodic queues. *J. Appl. Probab.* **24**, 215-225 (1987).
26. Risk theory in a Markovian environment.*Scand. Act. J.* **1989**, 69-100 (1989).
27. The heavy traffic limit of a class of Markovian queueing models. *Opns. Res. Letters* **6**, 301-306 (1987).
28. Queueing simulation in heavy traffic. *Math. Opns. Res.* **17**, 84-111 (1992).
29. (with S. Schock Petersen) Ruin probabilities expressed in terms of storage processes. *Adv. Appl. Probab.* **20**, 913-916 (1988).
30. Validating the heavy-traffic performance of regenerative simulation. *Stochastic Models* **5**, 617-628 (1989).
31. Exponential families and regression in the Monte Carlo study of queues and random walks. *Ann. Statist.* **18**, 1851-1867 (1990).
32. Aspects of matrix Wiener-Hopf factorisation in applied probability. *The Mathematical Scientist* **14**, 101-116 (1989).
33. Phase-type representations in random walk and queueing problems. *Ann. Probab.* **20**, 772–789 (1992).
34. Exponential families generated by phase-type distributions and other Markov lifetimes. *Scand. J. Statist.* **16**, 319-334 (1989).
35. Ladder heights and the Markov-modulated M/G/1 queue. *Stoch. Proc. Appl.* **37**, 313-326 (1991).
36. (with V. Ramaswami) Probabilistic interpretations of some duality results for the matrix paradigms in queueing theory. *Stochastic Models* **6**, 715-733 (1990).
37. (with R. Y. Rubinstein) The efficiency and heavy traffic properties of the score function method in sensitivity analysis of queueing systems. *Adv. Appl. Probab.* **24**, 172-201 (1992).
38. Light traffic equivalence in single server queues. *Ann. Appl. Probab.* **2**, 555–574 (1992).
39. On coupling and weak convergence to stationarity. *Ann. Appl. Probab.* **2**, 739-751 (1992).
40. (with S.G. Foss) Renovation, regeneration and coupling in multiple-server queues in continuous time. Frontiers in Pure and Applied Probability. *Proceedings of the Third Finnish-Soviet Symposium on Probability Theory and Mathematical Statistics* (H. Niemi, G. Högnäs, A.N. Shiryaev & A.V. Melnikov eds), 1-6. VSP, Utrecht / TVP, Moscow (1993).
41. (with R.Y. Rubinstein) Response surface estimation and sensitivity analysis via efficient change of measure. *Stochastic Models* **9**, 313-339 (1993).
42. (with V. Schmidt) The ascending ladder height distribution for a certain class of dependent random walks. *Statistica Neerlandica* **47**, 269–277 (1993).
43. (with T. Rolski) Computational methods for ruin probabilities: a matrix-algorithmic approach. *Insurance: Mathematics and Economics* **10**, 259-274 (1991).
44. (with G. Koole) Marked point processes as limits of Markovian arrival streams. *J. Appl. Probab.* **30**, 365-372 (1993).
45. (with D. Perry) On cycle maxima, first passage problems and extreme value theory for queues. *Stochastic Models* **8**, 421-458 (1992).
46. (with T. Rolski) Risk theory in a periodic environment: the Cramér-Lundberg approximation and Lundberg's inequality. *Math. Opns. Res.* **19**, 410-433 (1994).

47. (with E. Jonsson) A dependability measure for non-repairable and degradable computing systems. Preprint 1991-116, Department of Computer Engineering, Chalmers University of Technology, Göteborg. Abridged and revised variants published in [47a], [47b], [47c], [47d].
    47a. (with E. Jonsson) A practical measure for some attributes in degradable computing systems. *Compendium from the Nordic Seminar on Dependable Computing Systems* (NS-DCD'92), August 19-21, Trondheim, 413-426 (1992).
    47b. (with E. Jonsson) A practical dependability measure for embedded computer systems. *IFAC 12th Triennial World Congress*, Sydney, Australia, 647-652. Pergamon Press.
    47c. (with E. Jonsson & M. Andersson) A practical dependability measure for degradable computer systems with non–exponential degradation. *IFAC Fault Detection, Supervision and Safety for Technical Processes*, Espoo, Finland, 1994. 231-237.
    47d. (with E. Jonsson & M. Andersson) An attempt to quantitative modelling of behavioural security. *Proceedings of the* $11^{\text{th}}$ *International Security Conference*, Cape Town, South Africa 1995.
48. (with P.W. Glynn & H. Thorisson) Stationarity detection in the initial transient problem. *ACM Transactions of Modeling and Computer Simulation* **2**, 130-157 (1992).
49. (with M. Bladt) Renewal theory and queueing algorithms for matrix-exponential distributions. *Matrix-Analytic Methods in Stochastic Models* (A.S. Alfa & S. Chakravarty, eds.), 313–341. Marcel Dekker, New York (1996).
50. (with C.–L. Wang) Variance reduction for simulating transient GI/G/1 behavior. *Probab. Th. Eng. Inf. Sc.* **10**, 197–205 (1996).
51. (with R.Y. Rubinstein & C.–L. Wang) Efficient rare events simulation via likelihood ratios. *J. Appl. Probab.* **31**, 797-815 (1994).
52. Stationary distributions for fluid flow models with or without Brownian noise. *Stochastic Models* **11**, 21-49 (1995).
53. (with B. Melamed) Regeneration and likelihood ratios in TES processes. *Acta Applicandae Mathematicae* **34**, 237-260 (1994).
54. (with L. Fløe Henriksen & C. Klüppelberg) Large claims approximations for risk processes in a Markovian environment. *Stoch. Proc. Appl.* **54**, 29-43 (1994).
55. (with M. Bladt) Phase-type distributions and risk processes with state–dependent premiums. *Scand. Act. J.* **1996**, 19–36.
56. (with O. Häggström & O. Nerman) EMPHT — A program for fitting phase-type distributions. *Studies in Statistical Quality Control and Reliability* **992:4**. Mathematical Statistics, Chalmers University of Technology and the University of Göteborg.
57. Busy period analysis, rare events and transient behaviour in fluid flow models. *Journal of Applied Mathematics and Stochastic Analysis* **7**(3) (Special Jubilee Issue in Honor of Lajos Takacs), 269-299 (1994).
58. (with M.Bladt) Poisson's equation for queues with Markovian marked point process input. Point Processes in Queueing Theory. *Queueing Systems* **17**, 235-274 (1974). Invited paper.
59. (with M.Bladt) A sample path approach to mean busy periods for Markov-modulated queues and fluids. *Adv. Appl. Probab.* **26**, 1117-1121 (1994).
60. (with D. Perry) Rejection rules in the M/G/1 queue. *Queueing Systems* **19**, 105-130.
61. (with P. Glynn & J. Pitman) Discretization error in the simulation of one–dimensional reflecting Brownian motion. *Ann. Appl. Probab.* **5**, 875–896 (1996).
62. (with V. Schmidt) Ladder height distributions with marks. *Stoch. Proc. Appl.* **58**, 105–119 (1995).
63. (with O. Kella) Rate modulation in dams and ruin problems. *J. Appl. Probab.* **33**, 523–535 (1996).

64. (with H.M. Nielsen) Ruin probabilities via local adjustment coefficients. *J. Appl. Probab.* **32**, 736–755 (1995).
65. (with O. Nerman & M. Olsson) Fitting phase-type distributions via the EM algorithm. *Scand. J. Statist.* **23**, 419–441 (1996).
66. (with A. Frey, T. Rolski & V. Schmidt) Does Markov-modulation increase the risk? *ASTIN Bull.* **25**, 49–66 (1995).
67. (with R.Y. Rubinstein) Steady–state rare events simulation and its complexity properties. *Advances in Queueing: Models, Methods & Problems* (J. Dshalalow ed.), 429–466. CRC Press, Boca Raton, Florida (1995).
68. (with K. Sigman) Monotone stochastic recursions and their duals. *Probab. Th. Eng. Inf. Sc.* **10**, 1–20 (1996).
69. Stationary distributions via first passage times. *Advances in Queueing: Models, Methods & Problems* (J. Dshalalow ed.), 79–102. CRC Press, Boca Raton, Florida (1995).
70. (with D. Perry) Operational calculus for matrix-exponential distributions, with applications to Brownian $(q, Q)$ models. *Math. Opns. Res.* **23**, 166–176 (1998).
71. (with J.L. Teugels) Convergence rates for M/G/1 queues and ruin problems with heavy tails. *J. Appl. Probab.* **33**, 1181–1190 (1996).
72. (with C. Klüppelberg) Large deviations results for subexponential tails, with applications to insurance risk. *Stoch. Proc. Appl.* **64**, 103–125 (1996).
73. (with C. Klüppelberg) Stationary M/G/1 excursions in the presence of heavy tails. *J. Appl. Probab.* **34**, 208–212 (1997).
74. A probabilistic look at the Wiener-Hopf equation. *SIAM Review* **40**, 189–201 (1998).
75. (with B. Højgaard) Finite horizon ruin probabilities for Markov-modulated risk processes with heavy tails. *Th. Random Processes* **2**, 96–107 (1996).
76. (with M. Taksar) Controlled diffusion models for optimal dividend payout. *Insurance: Mathematics and Economics* **20**, 1–15 (1997).
77. Subexponential asymptotics for stochastic processes: extremal behaviour, stationary distributions and first passage probabilities. *Ann. Appl. Probab.* **8**, 354–374 (1998).
78. (with K. Binswanger) Ruin probability simulation for subexponential claims. *ASTIN Bull.* **27**, 297–318 (1997).
79. (with T.S. Turova) Stationarity properties of neural networks. *J. Appl. Probab.* **35**, 783–794 (1998).
80. (with R.Y. Rubinstein) Sensitivity analysis of insurance risk models via simulation. *Management Science* **45**, 1125–1141 (1999) .
81. (with H. Schmidli & V. Schmidt) Tail probabilities for non–standard risk and queueing processes. *Adv. Appl. Probab.* **31**, 422–447 (1999).
82. (with B. Højgaard) Approximations for finite horizon ruin probabilities in the renewal model. *Scand. Act. J.* **99**, 106–119 (1999).
83. (with P. Nilsson & T. Fagerström) The evolution of postponed germination in temporally homogeneous environments. Manuscript, Department of Theoretical Ecology, Lund University.
84. (with C.A. O'Cinneide) Representations for matrix–geometric and matrix-exponential steady–state distributions with applications to many–server queues. *Stochastic Models* **14**, 369–387 (1998). Winner of the 1999 Marcel F. Neuts Applied Probability Award.
85. (with V. Kalashnikov) Failure rates for regenerative systems with heavy tails. *J. Math. Sci.* **93**, 486–500 (1999).
86. (with O. Kella) A multidimensional martingale for Markov additive processes and its applications. *Adv. Appl. Probab.* **32**, 376–393 (2000).

87. (with K. Binswanger & B. Højgaard) Rare events simulation for heavy–tailed distributions. *Bernoulli* **6**, 303–322 (2000).
88. (with C. Klüppelberg & K. Sigman) Sampling at subexponential times, with queueing applications. *Stoch. Proc. Appl.* **79**, 265–286 (1999).
89. (with J.R. Møller) Tail asymptotics for M/G/1 type queueing models with subexponential increments. *Queueing Systems* **33**, 153–176 (1999).
90. (with B. Højgaard & M. Taksar) Optimal risk control and dividend distribution policies. Example of excess–of–loss reinsurance for an insurance corporation. *Finance and Stochastics* **4**, 299–324.
91. (with M. Bladt) Point processes with finite–dimensional conditional probabilities. *Stoch. Proc. Appl.* **82**, 127–142 (1999).
92. (with C.A. O'Cinneide) On the tail of the waiting time in a Markov–modulated M/G/1 queue. *Opns. Res.* **50**, 559–565 (2002).
93. On the ruin problem for some adapted premium rules. In *Probabilistic Analysis of Rare Events: Theory and Problems of Safety* (V.V. Kalashnikov & A.M. Andronov, eds.), 1-19. Riga Aviations University.
94. (with J.F. Collamore) Exact asymptotics for a large deviations problem for the GI/G/1 queue. *Markov Proc. Rel. Fields* 5, 451–476 (1999).
95. (with O. Kella) Optional stopping of some exponential martingales for Lévy processes with or without reflection. *Stoch. Proc. Appl.* **91**, 47–55 (2001).
96. (with J.R. Møller) Calculation of the steady–state waiting time distribution in GI/PH/$c$ and MAP/PH/$c$ queues. *Queueing Systems* **37**, 9–29 (2001).
97. *Ruin Probabilities* (x+388 pp.). World Scientific Publishing Co., Singapore (2000).
98. (with M. Jobmann & H.P. Schwefel) Explicit buffer overflow calculations for queues via martingales. *Queueing Systems* **42**, 63–88 (2002)
99. (with J. Rosiński) Approximations for small jumps of Lévy processes with a view towards simulation. *J. Appl. Probab.* **38**, 482–493.
100. (with P. Frantz, M. Jobmann & H.P. Schwefel) Large deviations and fast simulation in the presence of boundaries. *Stoch. Proc. Appl.* **102**, 1–23 (2002).
101. (with V. Kalashnikov, D. Konstantinides, C. Klüppelberg & G. Tsitsiashvili) A local limit theorem for random walk maxima with heavy tails. *Statistics and Probability Letters* **56**, 399–404 (2002).
102. (with J.R. Møller) Risk comparisons of premium rules: optimality and a life insurance study. *Insurance: Mathematics and Economics* **32**, 331–344 (2003).
103. (with F. Avram & M. Usabel) Erlangian approximations for finite–horizon ruin probabilities. *ASTIN Bulletin* **32**,267–281 (2002).
104. (with S. Foss & D. Korshunov) Asymptotics for sums of random variables with local subexponential behaviour. *J. Theor. Probab.* **16**, 489–518 (2003).
105. (with F. Avram & M. Pistorius) Russian and American put options under exponential phase-type Lévy models. *Stoch. Proc. Appl.* **109**, 79-111 (2004).
106. (with M. Pihlsgård) Transient properties of many–server queues and related QBD's. *Queueing Systems* **46**, 249-270 (2004).
107. *Applied Probability and Queues*, Second Edition. Springer–Verlag, New York (2003).
108. (with D.P. Kroese & R.Y. Rubinstein) Heavy tails, importance sampling and cross–entropy. *Stochastic Models* **21**, 57–76 (2005).
109. (with D.P. Kroese) Improved algorithms for rare event simulation with heavy tails. *Adv. Appl. Probab.* **38**, 545–558 (2006).

110. (with S. Rasmus & M. Wiktorsson) Pricing of some exotic options with NIG Lévy input. In *Computational Science — ICCS 2004: 4th International Conference, Krakow, Poland. Proceedings, Part* **IV** (M. Bubak *et al.*, eds), 795–802. Lecture Notes In Computer Science **3039**. Springer-Verlag (2004).
111. Terminal distributions for skipfree Markov additive processes with absorbtion. *Thiele Research Report* **14, 2004**. `www.thiele.au.dk`.
112. (with M. Pihlsgård) Performance analysis with truncated heavy-tailed distributions. *Methodology and Computing in Applied Probability* **7**, 439–457 (2005).
113. (with M. Pihlsgård) Loss rates for Lévy processes with two reflecting barriers. *Math. Oper. Res.* **32**, 308-321 (2007).
114. (with H. Albrecher) Ruin probabilities and aggregate claims distributions for sott noise Cox processes. *Scand. Act. J.* **2006**, 86–110.
115. (with D. Madan & M. Pistorius) Pricing equity defaults swaps under an approximation to the CMGY Lévy model. *J. Comp. Finance* **11**, 79–93 (2008).
116. (with H. Albrecher & D. Kortschak) Tail asymptotics for sums of dependent risks. *Extremes* **9**, 107–130 (2006).
117. (with L. Rojas-Nandayapa) Asymptotics of sums of lognormal random variables with Gaussian copula. *Statist. Probab. Letters* **78**, 2709–2714 (2008).
118. (with R. Sheahan, L. Lipsky & P.M. Fiorini) On the completion time distribution for tasks that must restart from the beginning if failure occurs. *ACM SIGMETRICS Performance Evaluation Review* **34**, 24–26 (2006).
119. (with L. Rojas-Nandayapa) Efficient simulation of finite horizon problems in queueing and insurance risk. *Queueing Systems* **57**, 85–97 (2007).
120. (with P.M. Fiorini, L. Lipsky, T. Rolski & R. Sheahan) Asymptotic behaviour of total times for jobs that must start over if a failure occurs. *Math. Oper. Res.* **33**, 932–944 (2008).
121. (with L.N. Andersen) Parallel computing, failure recovery, and extreme values. *J. Statist. Th. Pract.* **2**, 279–292 (2008).
122. (with P.W. Glynn) *Stochastic Simulation: Algorithms and Analysis.* Springer-Verlag (2007).
123. (with J. Blanchet, S. Juneja & L. Rojas-Nandayapa) Efficient simulation of tail probabilities of sums of correlated lognormals. *Ann. Oper. Res.* (accepted; 2010).
124. (with A. Hobolth) Bisection ideas in end-point conditioned Markov process simulation. *Proceedings of the 7th International Workshop on Rare Event Simulation, September 24-26 2008*, Rennes France (G. Rubino & B. Tuffin, eds.) pp. 121–130.
125. Importance sampling for failure probabilities in computing and data transmission. *J. Appl. Probab.* **46**, 768–790 (2009).
126. (with T. Rydén) A note on skewness in regenerative simulation. *Communications in Statistics — Simulation and Computation* (published).
127. (with L.N. Andersen) Local time asymptotics for centered Lévy processes with two-sided reflection. *Stochastic Models* (published).
128. (with A. Rønn-Nielsen) Failure recovery via RESTART: Wallclock models. *Submitted.*
129. (with H. Albrecher) *Ruin Probabilities* (2nd ed.). 606+x pp. Advanced Series in Statistical Sciences & Applied Probability **14**, World Scientific Publishing Co.
130. (with P.W. Glynn) Harris recurrence and MCMC: a simplified approach. *Statist. Probab. Letters* (published).
131. (with A. Hobolth) Markov bridges, bisection and variance reduction. Accepted for *Proceedings of MCQMC2010.*

132. (with H. Albrecher D. Kortschak) Tail asymptotics for dependent subexponential differences.*Submitted.*
133. (with D. Kortschak) Tail asymptotics forSecond order corrections for the limits of normalized ruin times in the presence of heavy tails.*Submitted.*

## Selected Lecture Notes and Expository Papers

A1 *Design and Analysis of Experiments* (98 pp., in Danish). Institute of Mathematical Statistics, University of Copenhagen (1975, revised 1979).

A2 *Measure-theoretic Foundations of Probability Theory in Polish Spaces* (58 pp.) Institute of Mathematical Statistics, University of Copenhagen (1978, revised 1987).

A3 (as editor) *Problems and Exercises in Probability Theory* (43 pp.). Institute of Mathematical Statistics, University of Copenhagen.

A4 Branching Processes. *Encyclopedia of Statistical Sciences* (Kotz, Johnson, Read ed.), 316-319 (1982). Wiley, New York.

A5 (as editor) *Problems for Statistik 2.* Institute of Mathematical Statistics, University of Copenhagen.

A6 Estimation theory for multitype branching processes. *Semi-Markov Models. Theory and Applications* (J. Janssen ed.), 385-395 (1986). Plenum, New York.

A7 Kø–teori. Hverdagsproblemer og teoretisk matematik. *Hovedomraadet Naturligvis*, 20-21 (1983).

A8 Hvor farligt er det at være medlem af Dansk Bjergklub? *Dansk Bjergklub* **4-1987**,17-19.

A9 Nogle vekselvirkninger mellem sandsynlighedslære og datalogi. *Jubileumsföreläsning*, Chalmers Tekniska Högskola 1. Marts 1990. 11 pp.

A10 Phase-type representation of waiting times. *Queueing, Performance and Control in ATM* (J.W. Cohen & C.D. Pack, eds.), 157-159 (1991). North-Holland, Amsterdam.

A11 (with R.Y. Rubinstein) The performance of the score function method in sensitivity analysis and stochastic optimization. *Simulation and Optimization.* Proceedings, Laxenburg, Austria, August 23-25, 1990 (G. Pflug & U. Dieter, eds.). Lecture Notes in Economics and Mathematical Systems **374**, 1-13. Springer-Verlag.

A12 (with O. Nerman) Fitting phase-type distributions via the EM algorithm. *Symposium i Anvendt Statistik*, Copenhagen January 21-23 (K. Vest Nielsen ed.), 335-346 (1991).

A13 A tutorial on queuing networks. *Networks and Chaos — Statistical and Probabilistic Aspects* (O.E. Barndorff-Nielsen, J.L. Jensen & W.S. Kendall eds.), 251-275. Chapman & Hall, London (1993).

A14 (as editor, with R.Y. Rubinstein & A. Shapiro) *Sensitivity Analysis and Optimization of Discrete Events Systems. Annals of Operations Research* **39** (1992).

A15 *Markov Chains and Related Topics. A Short Second Course.* Internal Report IR-94-2031, Department of Mathematics and Computer Science, Aalborg University (1994).

A16 Phase-type distributions and related point processes: fitting and recent advances. *Matrix-Analytic Methods in Stochastic Models* (A.S. Alfa & S. Chakravarty, eds.), 137–149. Marcel Dekker, New York (1996).

A17 (with M. Olsson) Phase–type distributions *Encyclopedia of Statistical Sciences, Update Volume* **2** (Kotz, Read, Banks eds.), 525–530. Wiley (1998).

A18 Rare events in the presence of heavy tails. In *Stochastic Networks: Rare Events and Stability* (P. Glasserman, K. Sigman, D. Yao eds.), pp. 197-214. Springer–Verlag (1996).

A19 (with C.A. O'Cinneide) Matrix–exponential distributions [Distributions with a rational Laplace transform] *Encyclopedia of Statistical Sciences, Supplementary Volume* (Kotz, Read, Banks eds.), 435-440. Wiley.

A20 Papers for *Danmarks Nationalleksikon*: Køteori, Stationær process, Stokastisk process, Skokastisk variabel (1998–2000).

A21 Extreme value theory for queues via cycle maxima. *Extremes* **1**, 137–168.

A22 Rare events: how reliable are probability calculations? (in Swedish). *Lundaforskare föreläsar* **29**, 14–19 (1997).

A23 *Statistical Models and Methods. Lecture Notes for MAS208.* 141 pp. Department of Mathematical Statistics, Lund University.

A24 Matrix–analytic models and their analysis. *Scand. J. Statist.* **27**, 193–226 (2000). Invited paper based upon a series of lectures at the 17th Nordic Conference on Mathematical Statistics, 1998.

A25 Semi–Markov queues with heavy tails. In *Semi–Markov Models and Applications* (J. Janssen & N. Limnios, eds.), 269–284. Kluwer (1999).

A26 *Stochastic Simulation. With a View towards Stochastic Processes.* Lecture Notes **2**, MaPhySto, Aarhus University. 146+6 pp. (1999).

A27 Large deviations in rare events simulation: examples, counterexamples and alternatives. *Monte Carlo and Quasi–Monte Carlo Methods* (K.T. Fang, F. Hickernell & H. Niederreiter, eds.), 1–9. Springer–Verlag (2002).

A28 (as editor) Section 10, PROBABILITY THEORY of *Encyclopedia of Actuarial Sciences* (B. Sundt & J.L. Teugels, eds.). Wiley 2004.

A29 Articles for *Encyclopedia of Actuarial Sciences* (B. Sundt & J.L. Teugels, eds.), Wiley 2004: RANDOM VARIABLE, RARE EVENT, SIMULATION OF STOCHASTIC PROCESSES, STOCHASTIC PROCESS.

A30 Forskelligt om risiko [in Danish]. *Matilde* **35**, 14–18, 2008.

A31 (as editor, co-edited with H. Lyang) Section 21, ACTUARIAL METHODS of *Encyclopedia of Quantitative Finance* (R. Cont & P. Tankov, eds.). Wiley 2010.

A32 Articles for *Encyclopedia of Quantitative Finance* (R. Cont & P. Tankov, eds.), Wiley 2010 RARE EVENT SIMULATION, RUIN THEORY.

A33 (co-edited with O.J. Boxma) *100 Years of Queuing — The Erlang Centennial. QUESTA* **63**, vols. 1–4, 2009.