

# PUBLICATIONS AND CITATIONS

by

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The signs shown in the table below are used in Sections 1–3 on the right hand margins for indicating information on the publications concerned.

<i>Refereed Publication</i>	<i>Unrefereed Publication</i>	<i>Sole Author</i>	<i>Joint Author</i>
R	U	*	**

**1 Theses**

- [1.1] *Über die schwache Konvergenz zufällig indizierter Folgen von Zufallsgrößen.* R \*  
Diplomarbeit. Mathematische Fakultät der Albert-Ludwigs-Universität  
Freiburg, Freiburg im Breisgau, Germany (1977).  
Referenced in [9.1].
- [1.2] *Zur Theorie sequenzieller Konfidenzbereiche und Tests der Schärfe 1.* Dok- R \*  
torarbeit. Mathematische Fakultät der Albert-Ludwigs-Universität Frei-  
burg, Freiburg im Breisgau, Germany (1980).
- [1.3] *Dependability for systems with a partitioned state space: Markov and semi- R \*  
Markov theory and computational implementation.* Habilitationsschrift.  
Fakultät für Mathematik und Naturwissenschaften der Technischen Uni-  
versität Bergakademie Freiberg, Freiberg/Sachsen, Germany (1993).

**2 Books & Book Chapters**

- [2.1] Dependability for systems with a partitioned state space: Markov and R \*  
semi-Markov theory and computational implementation.  
*Lecture Notes in Statistics*, Vol. 90, Springer-Verlag (1994). ix+241 pp.  
ISBN 0-387-94333-1 Springer-Verlag New York, Berlin, Heidelberg  
ISBN 3-540-94333-1 Springer-Verlag Berlin, Heidelberg, New York  
Referenced in [9.52], [9.60], [9.63], [9.64], [9.69], [9.74], [9.77], [9.78], [9.80],  
[9.84], [9.85], [9.89], [9.90], [9.94], [9.100], [9.107], [9.118], [9.119], [9.121],  
[9.123], [9.129], [9.132], [9.137], [9.139], [9.141], [9.144], [9.154], [9.157],  
[9.167], [9.169], [9.174], [9.176].
- [2.2] Prolog Techniques. R \*  
Ventus Publishing ApS, Copenhagen, Denmark, 2009.  
ISBN 978-87-7681-476-2.  
  
Freely available from  
<http://bookboon.com/uk/student/it/prolog-techniques-applications-of-prolog>
- [2.3] Applications of Prolog. R \*  
Ventus Publishing ApS, Copenhagen, Denmark, 2009.  
ISBN 978-87-7681-514-1.

Freely available from

<http://bookboon.com/uk/student/it/applications-of-prolog>

- [2.4] Recovery block reliability analysis with failure clustering. In *Dependable Computing and Fault-Tolerant Systems, Vol. 4*, A. Avizienis and J.-C. Laprie (eds.), pp. 75-103. Wien, New York: Springer-Verlag, 1991. (ISSN 0932-558, ISBN 3-211-82249-6 and 0387-82249-6) R \*

(For further details see [3.18].)

- [2.5] Transient analysis of semi-Markov reliability models – a tutorial review with emphasis on discrete-parameter approaches. In *Stochastic Models in Reliability and Maintenance*, S. Osaki (ed.), pp. 219-251, Springer-Verlag, Berlin, Heidelberg, 2002. (ISBN: 3-540-43133-0) R \*
- Referenced in [9.120], [9.125], [9.134], [9.135], [9.148], [9.149], [9.155], [9.173].

### 3 Further Published Work and Work Accepted for Publication

#### 3.1 Probability Theory & Statistics

- [3.1] A note on confidence sequences in multiparameter exponential families. *Journal of Multivariate Analysis*, 9, 337-340 (1979). (ISSN 0047-259X) doi:10.1016/0047-259X(79)90091-5 R \*
- Referenced in [9.12].
- [3.2] An invariance principle in k-dimensional extended renewal theory. *Journal of Applied Probability*, 16, 567-574 (1979). (ISSN 0021-9002) doi:10.2307/3213085 R \*
- Referenced in [9.5], [9.6], [9.16], [9.28], [9.49], [9.66].
- [3.3] A note on strongly mixing lattices of random variables. *Zeitschrift für Wahrscheinlichkeitstheorie und verwandte Gebiete*, 50, 135-136 (1979). Joint paper with E. Eberlein. (ISSN 0044-3719) doi:10.1007/BF00533634 R \*\*
- Referenced in [9.11], [9.153], [9.162].
- [3.4] A theorem on the departure of randomly indexed U-statistics from normality with an application in fixed-width sequential interval estimation. *Tagungsberichte des Mathematischen Forschungsinstitutes Oberwolfach*, Oberwolfach, Germany, Vol. 51/1979, 9-10 (1979). (Conference paper version of [3.6].) R \*

- [3.5] On the convergence rate of fixed-width sequential confidence intervals. R \*  
*Scandinavian Actuarial Journal*, 107-111 (1980). (ISSN 0346-1238)  
 Referenced in [9.2], [9.3], [9.4], [9.7], [9.8], [9.9], [9.13], [9.14], [9.18], [9.37],  
 [9.47], [9.55], [9.56], [9.58], [9.152].

- [3.6] A theorem on the departure of randomly indexed U-statistics from normality with an application in fixed-width sequential interval estimation. R \*  
*Sankhya*, Series A, 43, 84-99 (1981). (ISSN 0581-572X)  
 Referenced in [9.8], [9.10], [9.13], [9.18], [9.22], [9.126].

### 3.2 Foundations Engineering

- [3.7] Foundation pressures beneath rectangular footings. *Proceedings of the Institution of Civil Engineers*, Part 2, 83, 465-473 (1987). (ISSN 0307 8361) R \*  
 Referenced in [9.15].

### 3.3 Logic Programming

- [3.8] Enigma 1225: Prolog-assisted solution of a puzzle using discrete mathematics. *Computers and Mathematics with Applications*, 52, 383-400 (2006). R \*  
 (ISSN 0898-1221)  
 doi:10.1016/j.camwa.2006.03.020  
 Referenced in [9.143], [9.159].

- [3.9] Rotations in the plane and Prolog. *Science of Computer Programming*, 66, 154-161 (2007). (ISSN 0167-6423) R \*  
 doi:10.1016/j.scico.2007.01.002

- [3.10] Difference Lists in Prolog. *Teaching Mathematics and Computer Science*, 8(1), 73-84 (2010). (ISSN 1589-7389) R \*  
<http://tmcs.math.klte.hu/Contents/2010-Vol-VIII-Issue-I/tmcs-2010-1-csenki-abstract.pdf>

### 3.4 Joint Work with Pharmacy

- [3.11] Deconvolution of shunt route permeation from epidermal absorption data – a skin sandwich method. In *Perspectives in Percutaneous Penetration*, Volume 10a (eds. K.R. Brain and K.A. Walters). Vol. 10a. STS Publishing, Cardiff UK, 2006. Joint paper with M.C. Bonner and B.W. Barry. (ISBN 0948917326) R \*\*

### 3.5 Reliability

#### 3.5.1 Structural Reliability

- [3.12] Ultimate limit state analysis of unstiffened and stiffened structural com- R \*\*

ponents. In *Proceedings of the 3rd Conference on Integrity of Offshore Structures*, pp. 145-167, Glasgow University, 28-29 September 1987 (eds. D. Faulkner, M. J. Cowling and A. Incecik). London & New York: Elsevier Science Publishers, 1988. Refereed conference paper jointly with D. Smith and C. P. Ellinas. (ISBN 1-85166-146-8)

Referenced in [9.65].

- [3.13] A new Monte Carlo technique in structural reliability with a plastic frame example. In *Proceedings of the 2nd IFIP WG 7.5 Working Conference on Reliability and Optimization of Structural Systems*, Imperial College London, 26-28 September 1988 (ed. P. Thoft-Christensen). Lecture Notes in Engineering, Vol. 48, 47-64. Berlin, Heidelberg, New York: Springer-Verlag, 1989. Refereed conference. (ISBN 3-540-51283-7 and 0-387-51283-7)

Referenced in [9.34].

- [3.14] An improved Monte-Carlo method in structural reliability. *Reliability Engineering and System Safety*, Elsevier, 24, 275-292 (1989). (ISSN 0951-8320)

doi:10.1016/0951-8320(89)90045-8

Referenced in [9.26], [9.29], [9.34], [9.67], [9.95], [9.164].

### 3.5.2 Software Reliability

- [3.15] Reliability models of fault tolerant software, Centre for Software Reliability. Research Report, Centre for Software Reliability, The City University, London, 1989.

Referenced in [9.31].

- [3.16] Recovery block reliability modelling with nested clusters of failure points. Research Report, Centre for Software Reliability, The City University, London, 1989.

Referenced in [9.31].

- [3.17] Bayes predictive analysis of a fundamental software reliability model. *IEEE Transactions on Reliability*, 39, 177-183 (1990). (ISSN 0018-9529)

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Referenced in [9.20], [9.21], [9.35], [9.36], [9.43], [9.44], [9.91], [9.97], [9.102], [9.103], [9.105], [9.108], [9.112], [9.113], [9.114], [9.116], [9.133], [9.138], [9.147], [9.150], [9.156], [9.170].

- [3.18] Recovery block reliability analysis with failure clustering. In *Proceedings of the 1st IFIP WG 10.4 International Working Conference on Dependable Computing for Critical Applications*, University of California, Santa Barbara, Ca., 23-25 August 1989 (eds. A. Avizienis and J.-C. Laprie). Dependable Computing and Fault-Tolerant Systems, Vol. 4, 75-103. Wien,

New York: Springer-Verlag, 1991. Refereed prestigious conference & refereed special volume in the Springer-Verlag series. (ISSN 0932-558, ISBN 3-211-82249-6 and 0387-82249-6)

Referenced in [9.17], [9.19], [9.20], [9.24], [9.25], [9.27], [9.30], [9.31], [9.33], [9.38], [9.39], [9.53], [9.75], [9.82], [9.88], [9.93], [9.104], [9.115], [9.122].

- [3.19] Statistical software failure prediction: Basics. *Computing*, pp. 30-31, 27 June 1991. (A British Computer Society trade publication with articles directed at practitioners and work reviewed by the magazine's editor.) U \*  
Referenced in [9.23].
- [3.20] Statistical software failure prediction: Advanced modelling. *Computing*, pp. 28-29, 4 July 1991. (A British Computer Society trade publication with articles directed at practitioners and work reviewed by the magazine's editor.) U \*  
Referenced in [9.23].
- [3.21] Software failure prediction. *Computing*, p. 36, 12 December 1991. (A British Computer Society trade publication with articles directed at practitioners and work reviewed by the magazine's editor.) U \*
- [3.22] Reliability analysis of recovery blocks with nested clusters of failure points. *IEEE Transactions on Reliability*, 42, 34-43 (1993). (ISSN 0018-9529)  
doi:10.1109/24.210268 R \*  
Referenced in [9.40], [9.59], [9.110].

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doi:10.1016/0304-4149(91)90084-P R \*  
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- [3.24] Some renewal-theoretic investigations in the theory of sojourn times in finite semi-Markov processes. *Journal of Applied Probability*, 28, 822-832 (1991). (ISSN 0021-9002)  
doi:10.2307/3214685 R \*  
Referenced in [9.51], [9.63], [9.64], [9.81], [9.129].
- [3.25] Some new aspects of the transient analysis of discrete-parameter Markov models with an application to the evaluation of repair events in power transmission. *IMA Journal of Mathematics Applied in Business and Industry*, 3, 193-206 (1991). (ISSN 0953-0061)  
doi:10.1093/imaman/3.3.193 R \*

- [3.26] The joint distribution of sojourn times in finite Markov processes. *Advances in Applied Probability*, 24, 141-160 (1992). (ISSN 0001-8678) R \*  
doi:10.2307/1427733  
Referenced in [9.52], [9.86], [9.118], [9.128], [9.146], [9.165], [9.168], [9.183].
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doi:10.1016/0026-2714(92)90435-N  
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- [3.28] Occupation frequencies for irreducible finite semi-Markov processes with reliability applications. *Computers & Operations Research*, 20, 249-259 (1993). (ISSN 0305-0548) R \*  
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- [3.29] On a counting variable in the theory of discrete-parameter Markov chains. *Statistics & Probability Letters*, 18, 105-112 (1993). (ISSN 0167-7152) R \*  
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- [3.30] Sojourn times with finite time-horizon in finite semi-Markov processes. *Applied Stochastic Models and Data Analysis*, 9, 251-265 (1993). (ISSN 8755-0024) R \*  
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doi:10.1016/0951-8320(94)90104-X  
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- [3.33] On the interval reliability of systems modelled by finite semi-Markov processes. *Microelectronics and Reliability*, 34, 1319-1335 (1994). (ISSN 0026-2714) R \*  
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- [3.35] A dependability measure for Markov models of repairable systems: Solution by randomization and computational experience. *Computers & Mathematics with Applications*, 30, 95-110 (1995). (ISSN 0097-4943)  
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- [3.38] An integral equation approach to the interval reliability of systems modelled by finite semi-Markov processes. *Reliability Engineering and System Safety*, Elsevier, 47, 37-45 (1995). (ISSN 0951-8320)  
doi:10.1016/0951-8320(94)00039-Q  
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- [3.40] Set reliability: a unified approach to reliability measures for systems modelled by finite semi-Markov processes. *Systems Analysis Modelling Simulation*, 20, 173-186 (1995). (ISSN 0232-9298)  
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- [3.44] Optimum allocation in stratified random sampling via Hölder's inequality. *The Statistician (Journal of the Royal Statistical Society, Series D)*, 46, 439-441 (1997). (ISSN 0039-0526)  
[doi:10.1111/1467-9884.00096](https://doi.org/10.1111/1467-9884.00096)  
Referenced in [9.92], [9.142], [9.171], [9.175]. R \*
- [3.45] A review of the marginal cost approach for order-replacement models for a spare unit. In *Advances in Safety & Reliability, Proceedings of ESREL 97, International Conference on Safety and Reliability*, Instituto Superior Tecnico, Lisbon, Portugal, 17-20 June 1997 (ed. C. G. Soares), Vol. 3, 1671-1679. Elsevier Science Publishers, Oxford, 1997. (ISBN 0-08-042835-5) R \*
- [3.46] Refined asymptotic analysis of two basic order-replacement models for a spare unit. *IMA Journal of Mathematics Applied in Business and Industry*, 9, 177-199 (1998). (ISSN 0953-0061)  
[doi:10.1093/imaman/9.2.177](https://doi.org/10.1093/imaman/9.2.177)  
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- [3.47] Reliability and dependability measures for systems modelled by Markov and semi-Markov processes - A review. In *Safety and Reliability, Proceedings of ESREL 98, International Conference on Safety and Reliability*, Norwegian University of Science and Technology, Trondheim, Norway, 16-19 June 1998 (eds. S. Lydersen, G. K. Hansen and H. A. Sandtorv). Vol. 1, 581-586. A. A. Balkema, Rotterdam, Brookfield, 1998. (ISBN 90 5410 966 1) R \*
- [3.48] Marginal cost analysis of some basic ordering policies for a spare unit and extensions. *International Journal of Reliability, Quality and Safety Engineering*, 5, 293-312 (1998). (ISSN 0218-4885)  
[doi:10.1142/S0218539398000261](https://doi.org/10.1142/S0218539398000261)  
Referenced in [9.71]. R \*
- [3.49] Asymptotic analysis of replacement models with retrospective cost structure. In *Safety and Reliability, Proceedings of ESREL 99, The European Conference on Safety and Reliability*, Technical University of Munich, R \*

- Munich-Garching, Germany, 13-17 September 1999 (eds. G. I. Schuëller and P. Kafka). Vol. 2, 1603-1608. A. A. Balkema, Rotterdam, Brookfield, 1999. (ISBN 90 5809 109 0)
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- [3.51] Analysis of random inspection policies. In *Safety and Reliability, Proceedings of ESREL 2003, The European Conference on Safety and Reliability*, Maastricht, The Netherlands, 15-18 June 2003 (eds. T. Bedford and P. H. A. J. M. van Gelder). Vol. 1, 457-463. A. A. Balkema, Lisse/Abingdon/Exton (Pa)/Tokyo, 2003. (ISBN 90 5809 551 7) R \*
- [3.52] Marginal cost analysis of single-item maintenance policies with several decision variables. *IMA Journal of Management Mathematics*, 15, 139-150 (2004). (ISSN 1471-678X)  
doi:10.1093/imaman/15.2.139 R \*
- [3.53] Specified demand patterns for finite Markov systems in discrete and continuous time with illustrative examples. *International Journal of Reliability, Quality and Safety Engineering*, 13, 547-564 (2006). (ISSN 0218-5393)  
doi:10.1142/S0218539306002422  
Referenced in [9.163], [9.183]. R \*
- [3.54] Joint interval reliability for Markov systems with an application in transmission line reliability. *Reliability Engineering and System Safety*, Elsevier, 92, 685-696 (2007). (ISSN 0951-8320)  
doi:10.1016/j.ress.2006.11.007  
Referenced in [9.166], [9.172], [9.178], [9.179], [9.180], [9.181], [9.183]. R \*
- [3.55] Stochastic demand patterns for Markov service facilities with neutral and active periods. In *Proceedings of the 6th IMA International Conference on Modelling in Industrial Maintenance and Reliability, MIMAR 2007*, organized by The Centre for Operational Research and Applied Statistics, Salford Business School, University of Salford, and the Institute of Mathematics and Its Applications (IMA), in The Lowry Centre, Salford Quays, Manchester, UK, September 10-11, 2007 (eds. M. Carr, P. Scarf and W. Wang), 68-73. (ISBN 978-0-905091-19-1) R \*
- [3.56] On the three-state weather model of transmission line failures. *Proceedings of the Institute of Mechanical Engineers, Part O: Journal of Risk and Reliability*, 221, 217-228 (2007). (ISSN 1748-006X (Print) 1748-0078 (Online))  
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- [3.58] OR50, The Golden Anniversary Conference Experience from a Mathematician's Perspective. *Inside OR* (The magazine of the British OR Society) No. 456, December 2008, 16-17, Birmingham, UK. U \*
- [3.59] Salient features of a lecture course in reliability theory. *International Journal of Mechanical Engineering Education*, Manchester University Press, 36, 339-365 (2008). (ISSN 0306-4190) . R \*
- [3.60] Stochastic demand patterns for Markov service facilities with neutral and active periods. *Reliability Engineering and System Safety*, Elsevier, 94, 382-393 (2009). (ISSN 0951-8320)  
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doi:10.1080/03081070902911550 R \*
- [3.62] Service facilities with Markovian demand and deterministic supply with an application in repair modelling. *IMA Journal of Management Mathematics*, 21(4), 373-384 (2010). (ISSN 1471-678X)  
doi:10.1093/imaman/dpn011 R \*
- [3.63] Independent events in elementary probability theory. *International Journal of Mathematical Education in Science and Technology*, Taylor and Francis, 42(5), 685-691 (2011). (ISSN: 1464-5211 (electronic), 0020-739X (paper))  
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doi:10.1016/j.ress.2011.06.008  
http://dx.doi.org/10.1016/j.ress.2011.06.008 R \*
- [3.65] Teaching reliability theory with the computer algebra system MAXIMA. *Teaching Mathematics and Computer Science*, 9(1), 45-75 (2011). (ISSN 1589-7389) R \*
- [3.66] Asymptotics for continuous lifetime distributions with polynomial failure rate with an application in reliability. *Reliability Engineering and System* R \*

*Safety*, Elsevier, 102, 1-4 (2012). (ISSN 0951-8320)  
doi:10.1016/j.ress.2012.02.004  
<http://dx.doi.org/10.1016/j.ress.2012.02.004>

## 4 Work submitted for publication

- [4.1] A differential equation for a class of discrete lifetime distributions with an application, (2011). R \*

## 5 Topics for future exploration

- [5.1] A reliability-based analysis of flexitime.  
[5.2] Temporal evolution of the joint interval reliability of a finite Markov system: analytic solution and simulation with SCILAB.  
[5.3] Structural Reliability, Automatic Differentiation and Haskell.

## 6 Book reviews

- [6.1] Book reviewed: S. M. Ross, Introduction to Probability Models, 5th edn., London, Academic Press, 1993. Review published in: *The Statistician (Journal of the Royal Statistical Society, Series D)*, 43, 467-468 (1994). (ISSN 0039-0526)  
[6.2] Book reviewed: P. Todorovic, An Introduction to Stochastic Processes and Their Applications, New York, Springer-Verlag, 1992. Review published in: *The Statistician (Journal of the Royal Statistical Society, Series D)*, 43, 472 (1994). (ISSN 0039-0526)  
[6.3] Book reviewed: M. Tichy, Applied Methods of Structural Reliability, Dordrecht, Kluwer, 1993. Review published in: *The Statistician (Journal of the Royal Statistical Society, Series D)*, 44, 414-415 (1995). (ISSN 0039-0526)  
[6.4] Book reviewed: J. Medhi, Stochastic Processes, New Delhi, Wiley Eastern, 1994. Review published in: *The Statistician (Journal of the Royal Statistical Society, Series D)*, 45, 393-394 (1996). (ISSN 0039-0526)

## 7 Documented refereeing

- [7.1] Appreciation to 1990 Referees. *Operations Research*, 39, 688-695 (1991). (ISSN 0030-364X)  
[7.2] Referees for 1992. *IEEE Transactions on Reliability*, 42, 327 (1993). (ISSN 0018-9529)

- [7.3] Referees for 1993. *IEEE Transactions on Reliability*, 43, 177-182 (1994). (ISSN 0018-9529)
- [7.4] Referees for 1995. *IEEE Transactions on Reliability*, 45 (1996). (ISSN 0018-9529)
- [7.5] List of Referees. *Software Testing, Verification and Reliability*, 12, 63-64 (2002). (ISSN: 0960-0833)  
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## 8 Conference presentations, external seminars and courses

- [8.1] A theorem on the departure of randomly indexed U-statistics from normality with an application in fixed-width sequential interval estimation. *Arbeitstagung Stochastik* (Stochastic workshop), Mathematisches Forschungsinstitut Oberwolfach, Oberwolfach, Germany, December 16-22, 1979.
- [8.2] A new Monte Carlo technique in structural reliability with a plastic frame example. *2nd IFIP Working Group 7.5 Conference on Reliability and Optimization of Structural Systems*, London, Imperial College of Science, Technology and Medicine, September 26-28, 1988.
- [8.3] Bayesian predictive analysis of a fundamental software reliability model. Symposium on *The Mathematics of Estimating Software Reliability*, organized by the Institute of Mathematics and Its Applications (IMA) and The Royal Institution of Great Britain, London, January 16, 1989.
- [8.4] Recovery block reliability analysis with failure clustering. *1st International Working Conference on Dependable Computing for Critical Applications*, organized by IFIP Working Group 10.4 on Dependable Computing and Fault Tolerance, University of California, Santa Barbara, California, USA, August 23-25, 1989.
- [8.5] Some new aspects of the transient analysis of discrete-parameter Markov models with an application to power transmission repair event evaluation. *1st International Conference on Mathematics in Industrial Maintenance*, organized by the Institute of Mathematics and Its Applications (IMA), University of Edinburgh, March 30-31, 1992.
- [8.6] A new measure of dependability for continuous time absorbing Markov systems with an application in power transmission reliability modelling. *Statistics and Industrial Mathematics Seminars*, The University of Birmingham, November 27, 1992.
- [8.7] Wahrscheinlichkeitstheoretische Methoden zur Berechnung der Sicherheit von Bauwerken. *Habilitationsvortrag*, Technische Universität Bergakademie Freiberg, Freiberg, Germany, October 22, 1993.

- [8.8] Transient analysis of semi-Markov reliability models. *Nottingham University Statistics Seminar Series*, The University of Nottingham, February 9, 1995.
- [8.9] A new approach to the cumulative operational time for semi-Markov models of repairable systems. *NATO Advanced Study Institute on Current Issues and Challenges in Reliability and Maintenance of Complex Systems*, Kemer, Antalya, Turkey, June 12-22, 1995.
- [8.10] Cumulative operational time analysis of semi-Markov models of repairable systems. *Operational Research Society Annual Conference 1996*, 'OR38', The University of Warwick, September 3-5, 1996.
- [8.11] Analysis of order-replacement models for a single spare unit. *European Workshop and Round Table on Maintenance Management*, Instituto Superior Tecnico, Lisbon, Portugal, 15-17 June 1997. (Invited Paper)
- [8.12] A review of the marginal cost approach for order-replacement models for a spare unit. *ESREL 97, European Safety and Reliability Conference, International Conference on Safety and Reliability*, Instituto Superior Tecnico, Lisbon, Portugal, 17-20 June 1997.
- [8.13] Approaches to statistical modelling and analysis in engineering. Presentation in the series *Programme of Short Courses for Research*, University of Bradford, February 25, 1998. (Repeated in 1999.)
- [8.14] Refined asymptotic analysis of two basic order-replacement models for a spare unit. *3rd International Conference on Mathematical Models in Industrial Maintenance*, organized by the Institute of Mathematics and Its Applications (IMA), University of Edinburgh, April 6-8, 1998.
- [8.15] Reliability and dependability measures for systems modelled by Markov and semi-Markov processes - a review. *ESREL 98, European Safety and Reliability Conference, International Conference on Safety and Reliability*, Norwegian University of Science and Technology, Trondheim, Norway, 16-19 June 1998.
- [8.16] Asymptotic analysis of replacement models with retrospective cost structure. *ESREL 99, European Conference on Safety and Reliability*, Technical University of Munich, Munich-Garching, Germany, 13-17 September 1999.
- [8.17] Functional programming implementation in Haskell of reliability and maintenance models. *4th International Conference on Mathematical Models in Industrial Maintenance*, organized by the Institute of Mathematics and Its Applications (IMA), University of Salford, April 9-11, 2001.

- [8.18] Stochastic demand patterns for Markov service facilities with neutral and active periods. *6th IMA International Conference on Modelling in Industrial Maintenance and Reliability*, organized by The Centre for Operational Research and Applied Statistics, Salford Business School, University of Salford, and the Institute of Mathematics and Its Applications (IMA), in The Lowry Centre, Salford Quays, Manchester, UK, September 10-11, 2007.
- [8.19] Teaching Reliability Theory with the Computer Algebra System MAXIMA, *Mathematical Education of Engineers*, 14th SEFI (MWG) Conference jointly with IMA, 6th April to 9th April 2008, Loughborough University, (2008). Poster & lecture presentation.
- [8.20] Flowgraph models in reliability and finite automata – What do they have in common? *Operational Research Society annual conference, OR50*, University of York, 9-11 September, 2008. (Participation was made possible by a financial award from the OR Society.)

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Counting publications and citations: Is more always better? Ludo Waltman, Nees Jan van Eck, and Paul Wouters. Centre for Science and Technology Studies, Leiden University, The Netherlands {waltmanlr, ecknjpvan, p.f.wouters}@cwts.leidenuniv.nl. We address this question in the context of bibliometric indices that aim to assess the scientific impact of individual researchers by counting their number of highly cited publications. The rewards for publications and citations can therefore be very useful, if you are doing proper work, which is not appreciated by those in control of commissioned research or the university management. Maurice Kogan has pointed to the difficulties critical researchers face when resources must be generated from negotiations with business or public administration.