

PETER GERRARD TAYLOR
CURRICULUM VITAE
September 21, 2004

1 General Information

Personal Details

Mailing Address: Department of Mathematics and Statistics
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Residential Address: 14 Barnet St,
Yarraville, Victoria 3013.

Telephone: +61 3 9332 8682.

Date of Birth: 2 May 1958.

Place of Birth: Nottingham, U.K.

Nationality: Australian and British.

Present Position: Professor of Operations Research
Department of Mathematics and Statistics,
University of Melbourne.

Research Interests

Stochastic modelling, Markov processes, queueing theory, modelling of telecommunications systems, design and analysis of traffic control algorithms, optimisation and control, modelling of biological systems, parameter estimation, stochastic Petri nets.

Previous Positions Held

Jan 2002 – Dec 2002	Professorial Fellow, (0.5 time) Department of Mathematics and Statistics, (0.5 time) Centre for Ultra Broadband Information Net- working (CUBIN), Department of Electrical and Electronic Engineering, University of Melbourne,
Jan 1998 – Dec 2001	(0.6 time) Director (level E), Teletraffic Research Centre, University of Adelaide. (0.1 time) Director (level E), Adstat Solutions, University of Adelaide. (0.3 time) Associate Professor, Department of Applied Mathematics, University of Adelaide.
Jan 1994 – Dec 1998	Senior Lecturer, Department of Applied Mathematics, University of Adelaide.
Jan 1991 – Dec 1993	Lecturer, Department of Applied Mathematics, University of Adelaide.
Jan 1989 – Dec 1990	Lecturer, Department of Mathematics, University of Western Australia.
Jan 1988 – Dec 1988	Lecturer, Department of Applied Mathematics, University of Adelaide.
March 1983 – Dec 1987	Tutor, Department of Applied Mathematics, University of Adelaide.
June 1982 – March 1983	Inspector (Class 8), Strategic Planning Division, Dept of Social Security.
Nov 1981 – June 1982	Inspector (Class 8), Special Projects Branch, Dept of Social Security.
June 1981 – Nov 1981	Clerk (Class 7), Benefits Control Branch, Dept of Social Security.
Feb 1981 – Jun 1981	Clerk (Class 5), Special Projects Branch, Dept of Social Security.
Jan 1980 – Feb 1981	Administrative Trainee, Commonwealth Public Service Board.

Education

Secondary: St. Peter's College, Adelaide (1971–1975).

Tertiary: University of Adelaide (1976–1979, 1983–1987).

Degrees: Ph.D. (Adel) 1987,
B.Sc. (Adel) 1979, 1st class Honours.

2 The Teletraffic Research Centre and Adstat Solutions

During the years 1998–2001, the greater proportion of my time was taken up with management, contract research and consulting activities. This followed from my involvement with the two research and consulting groups within the Department of Applied Mathematics at the University of Adelaide, the Teletraffic Research Centre (TRC) and Adstat Solutions. I was Director of both of these groups. My activities within these groups are described below.

The Teletraffic Research Centre

The Teletraffic Research Centre (TRC) has existed as a centre within the Department of Applied Mathematics at the University of Adelaide since 1985. I was involved with the TRC in various capacities between 1991 and 2001 and was its Director after 1998. In this role, I was responsible for all aspects of marketing, liaison with clients, project management and project delivery. I was also responsible for supervising, guiding and mentoring the staff within the TRC. During my time as Director, the TRC employed ten staff in various capacities to undertake consulting and contract research activities for the telecommunications industry. Its annual turnover was in the region of \$500,000 to \$600,000. During this time the TRC diversified its client base considerably. Among its clients were

- Telstra
- DSTO
- Fujitsu Nexion
- Gtech
- Foursticks
- Northern Domiciliary Care
- Ansett

Adstat Solutions

Adstat Solutions was the University of Adelaide's statistical consulting group. It was set up at the beginning of 2000 when the Department of Applied Mathematics merged with the Department of Statistics. I was its founding Director. Adstat Solutions undertook commercial statistical consulting projects of varying sizes for groups both inside and outside

the University of Adelaide. Its annual turnover was in the range \$100,000 to \$150,000. When I was Director, it employed one full-time statistical consultant and had one adjunct consultant who worked on the staff of the Department of Applied Mathematics. Among the clients for which it has undertaken projects were

- The Faculty of Engineering, Computer and Mathematical Sciences
- The Faculty of Science
- The Research Branch
- Healthcare Management Advisors
- Homestart Finance
- The Charles Sturt Council
- The Submarine Corporation
- The Country Fire Service
- Fauldings

Personal Consulting reports

Prior to my involvement with the TRC and Adstat Solutions, I undertook some consulting activities in my own right. These activities led to the following reports:

1. P.G. Taylor, A comparability measure for credit charges, for The Australian Federation of Credit Unions, 1990.
2. P.G. Taylor and H. Vu, A reliability analysis of a conveyor belt system, for Alcoa Australia, 1990.
3. P.G. Taylor, An analysis of two strategies for charging interest on a defaulted loan, for Adams Kandelaars Solicitors, 1992.
4. P.G. Taylor, A queueing model of waiting times for public housing in Australia, for Data Analysis Australia, 1992.

3 Academic Activities

Academic Awards and Honours

1. 1987, Co-author, T.M. Cherry Prize winning paper, 23rd AMS - Applied Mathematics Conference, Wairakei, 1987, for M.P. Rumsewicz and P.G. Taylor, *A Spot Welding Reliability Problem*.
2. 1989, William Culross Prize, for best Ph D thesis in the fields of Mathematical and Physical Sciences and Engineering, University of Adelaide.
3. 1989, Best paper award, Third International Workshop on Petri Nets and Performance Models, Kyoto (1989), for W. Henderson and P.G. Taylor, *Aggregation Methods in Exact Performance Analysis of Stochastic Petri Nets*.
4. 1995, Invitation to visit the University of Queensland as a Raybould Visiting Fellow.
5. 1999, Invitation to hold the IBM International Chair in Computer Science, Universite Libre de Bruxellés.

Competitive Research Grants

1. 1988 (URG, University of Adelaide (2341)) : *Insensitivity in Markov Processes* (with C.E.M. Pearce and W. Henderson).
2. 1989 (ARC Large grant 6829) : *Generalised Semi-Markov Processes, Networks of Queues, Stochastic Petri Nets and Related Stochastic Processes* (with C.E.M. Pearce and W. Henderson).
3. 1990 (SRG, University of Western Australia) : *Sensitivity Bounds in Queueing Systems*.
4. 1992-1994 (ARC Large grant A69132151) : *Algorithmic Methods in Batch Movement Queueing Networks and Stochastic Petri Nets* (with C.E.M. Pearce and W. Henderson).
5. 1992 (Minor University Research Grant, University of Adelaide) : *Queueing Networks with Negative Customers* (with W. Henderson).
6. 1994-1995 (URS, University of Adelaide) : *Stochastic and Statistical Modelling of Biological Systems* (with H. Possingham, C.E.M. Pearce, P. Solomon and W. Henderson).
7. 1996-1998 (ARC Large grant A69602762) : *Matrix-Analytic Methods in Applied Probability* (with W. Henderson, C.E.M. Pearce and P.K. Pollett).

8. 1996 (ARC Small grant) : *Optimal Design and Tariffing of Telecommunication Networks* (with N.G. Bean).
9. 1997-1999 (ARC Large grant A69702505) : *Management of Telecommunication Networks* (with N.G. Bean, A.E. Krzesinski and S.A. Berezner).
10. 2000-2002 (ARC Large grant A10033153) : *Scalable Dynamic Control of Logical Telecommunication Networks* (with S.A. Berezner, A.E. Krzesinski and Å Arvidsson).
11. 2001 I was a key researcher in the CRC for Smart Internet Technology (CRCSIT). I had to resign from the CRC when I moved to the University of Melbourne, because the University of Melbourne is not a participating institution in the CRC.
12. 2002-2004 (ARC Discovery project grant DP0209921) : *Operator-Analytic Methods in Telecommunication Systems* (with N.G. Bean, D.P. Kroese and P.K. Pollett).
13. 2003-2007 (ARC Discovery project DP0345507) : *Modelling, Measurement and Control of the Internet* (with D.N. Veitch). This project was incorporated into MASCOS when it started in July 2003.
14. 2003-2007 (MASCOS - The ARC Centre of Excellence for the Mathematics and Statistics of Complex Systems) : (with twelve other Chief Investigators).
15. 2004-2005 (ARC Linkage project LP0348907) : *Using Mathematics to Maximize the Value of Open-Pit Mines* (with N. Boland, G. A. Froyland and M. Menabde).
16. 2004-2006 (ARC Linkage project LP0349153) : *Modelling Patient Flows Through Hospitals: Optimizing Effective use of rResources* (with G. B. Byrnes, D. A. Campbell and C. A. Bain).

Editorial, Reviewing and Refereeing Activities

- Editor-in-Chief: *Stochastic Models* (2002-).
- Associate Editor: *Queueing Systems* (1997-).
- Reviewer: *Mathematical Reviews* (1988-2000).
- Referee: all the prestigious international journals in applied probability and teletraffic engineering.

Invitations to Conferences and Seminars

1. ITC Specialist's Seminar, Adelaide, September 1990.
2. ITC Specialist's Seminar, Cracow, Poland, April 1991.
3. Stochastic Networks Workshop, Institute for Mathematics and its Applications, University of Minneapolis, February 1994.
4. Numazu Seminar on Applied Probability, Numazu, Japan, July 1994.
5. Oberwohlfach Conference on Applied Probability, Oberwohlfach, Germany, December 1994.
6. Conference on Applied Stochastic Modelling in Telecommunication and Manufacturing Systems, Dagstuhl, Germany, September 1995.
7. First Australia-New Zealand Applied Probability Workshop, Second Valley, September 1997.
8. Conference on Modelling of Communication Networks via Stochastic Geometry, Dagstuhl, Germany, March 1998.
9. Conference on Advanced Stochastic Modelling Applied to Telecommunication Networks and Distributed Systems, Dagstuhl, Germany, April 1998.
10. Chinese University of Hong Kong Workshop on Applied Probability, Hong Kong, June 1999.
11. The Joint Meeting of the Australian and American Mathematical Societies, University of Melbourne, July 1999.
12. The COST 256 Symposium on Modeling and Simulation Environments for Terrestrial and Satellite Networks, Technical University of Aachen, Germany, September 2000.
13. The International Year of Mathematics 2000 Workshop, Canberra, November 2000.
14. The Joint Statistical meeting of the Indian International Statistical Association, New Delhi, India, December 2000/January 2001.
15. The Behrend Memorial Lecture, University of Melbourne, 2001.
16. The Medlin Memorial Lecture, University of Adelaide, 2001.
17. The 28th Stochastic Processes and their Applications Conference, University of Melbourne, July 2002.

18. The workshop on Applied Probability and Advanced Communication Networks, Bedlewo, Poland, May 26-30, 2003.
19. The Lunteren Conference on the Mathematics of Operations Research, Lunteren, The Netherlands, January 13-15, 2004.
20. ANZIAM 2004, Grand Chancellor Hotel, Hobart, Feb 1-5, 2004.

Contributed Papers and Seminars

In addition to the invited talks listed above, I have given 26 contributed talks at national and international conferences and 34 seminars to university departments, industry research groups and professional societies around the world. A full list of these talks is available on request.

Conference Organisation

1. Secretary, Seventh National Conference of A.S.O.R., Adelaide, August 1985.
2. Secretary, 22nd AMS - Applied Mathematics Conference, Wirrina, February 1986.
3. Secretary (in 1990), Eleventh National Conference of the Statistical Society of Australia, Perth, June 1992.
4. Member of Programme Committee, International Conference on Petri Nets and Performance Measures, Telecom Research Labs, Melbourne, December 1991.
5. Minute Secretary, 29th AMS - Applied Mathematics Conference, Hahndorf, February 1993.
6. Committee member, Australian Teletraffic Research Seminar, Murray River, December 1992.
7. Member of Programme Committee, Third INFORMS Conference on Telecommunications, Boca Raton, March 1995.
8. Member of Programme Committee, Third ATNAC, Hilton Hotel, Melbourne December 1996.
9. Co-Convenor, First Australia-New Zealand Workshop in Applied Probability, Second Valley, September 1997.
10. Member of Programme Committee, Fourth INFORMS Conference on Telecommunications, Boca Raton, March 1998.

11. Deputy Chairman, EMAC 1998, University of Adelaide, 13-15 July 1998.
12. Member of Programme Committee, Second International Conference on Matrix-Analytic Methods in Stochastic Models, Winnipeg, July 24-25, 1998.
13. Member of Programme Committee, International Workshop on Markov Processes and Controlled Markov Chains, Changsha, August 22-28, 1999.
14. Co-Chair of Programme Committee, Third International Conference on Matrix-Analytic Methods in Stochastic Models, Leuven, July 12-14, 2000.
15. Co-Chair of Programme Committee, Fourth International Conference on Matrix-Analytic Methods in Stochastic Models, Adelaide, July 14-18, 2002.
16. Member of Founding and Controlling Group, First-Eighth Adelaide-Melbourne Teletraffic Workshops, Halls Gap, Dec 1996-Dec 2003.
17. Program Committee Member, Noise in Communications Conference: SPIE Second International Symposium on Fluctuations and Noise (FaN04), Canary Islands, May 2004.

Membership of Professional Societies

1. Australian Society for Operations Research,
 - Secretary (S.A. Chapter) 1983-1984,
 - President (S.A. Chapter) 1985-1986,
 - Committee Member (S.A. Chapter) 1987-1988.
2. Australian Mathematical Society - ANZIAM.
3. Statistical Society of Australia.
4. Society for Industrial and Applied Mathematics (SIAM).

4 University Teaching and Administrative Activities

Lecturing Experience

- 1987–1988, University of Adelaide: Mathematics 1 (first year), Probability and Applications (second year), Random Processes (third year), Stochastic Processes (Honours).

- 1989–1990, University of Western Australia: Mathematical Sciences 100 (first year) Mathematical Statistics 2s1, Mathematical Statistics 255 (second year), Networks of Queues (Honours).
- 1991–2001, University of Adelaide: Mathematics 1, Mathematics 1M, Mathematical Applications 1H (first year), Mathematics IIM, Probability and Statistics II, Operations Research II (second year), Random Processes III, Applied Probability III, Stochastic Modelling for Telecommunications III (third year), Markov Processes, Networks of Queues, System Modelling and Simulation, Teletraffic Models (Honours).
- 2002-, University of Melbourne: Experimental Design and Data Analysis 620-160, Operations Research Techniques and Algorithms 620-361, Applied Stochastic Modelling 620-464, Probability 620-201.
- Short Courses: An Introductory Teletraffic Course.

Postgraduate Students

Since 1989, I have supervised twelve successful Ph D students and one successful M App Sc student. I am currently supervising nine Ph D students.

Honours Students

Since 1988, I have supervised 24 successful Honours students. I am currently supervising one Honours student.

Administrative Experience

- University of Adelaide 1983-1988: Tutor in charge of Mathematics 1, Editor - Faculty of Mathematical Sciences Descriptions of Courses, Lecturer in charge of Mathematics 1, Member of a committee to review the first-year mathematics curriculum.
- University of Western Australia 1988-1989: Lecturer in charge of postgraduate recruitment, Lecturer in charge of graduate employment.
- University of Adelaide 1991-2001: Lecturer in charge of 2nd year Applied Mathematics, Lecturer in charge of Mathematics 1, Lecturer in charge of Mathematical Applications 1H, Member of the Faculty Executive Committee, Member of the SPAM Information Technology Group, Member of the Faculty Research Committee, Member of the Board of the Institute for Information Technology and Telecommunications, Member of the Deputy Vice-Chancellor's Working Group on Research Fellows, University Representative on the SATAC Scaling Committee.

- University of Melbourne 2002-: Deputy Head of Department, Member of Academic Board, Member of University Academic Programs Committee: Shepherd for the Faculties of Music and Arts, Member of the Teaching and Learning (Multimedia and Educational Technologies Committee), Member of the Faculty of Science Planning and Resources Committee and Finance and Facilities Committee. Departmental Postgraduate Student Coordinator, Member of the Departmental Management, Undergraduate Studies, Research and Postgraduate Studies, and Equipment and IT Committees, Executive Committee Member, Centre of Excellence for the Mathematics and Statistics of Complex Systems.

5 Publications

Theses

1. P.G. Taylor, *A Predator-Prey Model for Aphids Infesting Lucerne*, Honours Thesis, University of Adelaide, 1979.
2. P.G. Taylor, *Aspects of Insensitivity in Stochastic Processes*, Ph.D. Thesis, University of Adelaide, 1987.

Monographs

1. G. Latouche and P.G. Taylor (editors), *Advances in Algorithmic Methods for Stochastic Models*, Notable Publications, New Jersey, July 2000.
2. G. Latouche and P.G. Taylor (editors), *Matrix-Analytic Methods: Theory and Applications*, Word Scientific Publications, Singapore, July 2002.

Fully-refereed Papers

1. M.P. Rumsewicz and P.G. Taylor, A Spot Welding Reliability Problem, *Journal of the Australian Mathematical Society Series B*, **29**, (1988) 257–265.
2. W. Henderson and P.G. Taylor, Insensitivity in Processes with Interruptions, *Journal of Applied Probability*, **26**, (1989) 242–258.
3. W. Henderson and P.G. Taylor, Alternative Routing Networks and Interruptions *Proceedings of the 12th International Teletraffic Conference*, Torino, (1988) 5.1B.2.
4. P.G. Taylor, Insensitivity in Processes with Zero Speeds, *Advances in Applied Probability*, **21**, (1989) 612–628.
5. W. Henderson, D. Lucic and P.G. Taylor, A Net Level Performance Analysis of Stochastic Petri Nets, *Journal of the Australian Mathematical Society Series B*, **31**, (1989) 176–187.
6. W. Henderson and P.G. Taylor, Aggregation Methods in Exact Performance Analysis of Stochastic Petri Nets, *Proceedings of the Third International Workshop on Petri Nets and Performance Models*, Kyoto (1989) 12–18.
7. W. Henderson, C.E.M. Pearce, P.G. Taylor and N.N. van Dijk, Closed Queueing Networks with Batch Services, *Queueing Systems*, **6**, (1990) 59–70.

8. W. Henderson and P.G. Taylor, Product Form in Networks of Queues with Batch Arrivals and Batch Services, *Queueing Systems*, **6**, (1990) 71-88.
9. W. Henderson and P.G. Taylor, Embedded Processes in Stochastic Petri Nets, *IEEE Transactions in Software Engineering*, **17**, No 2, (1991) 108-116.
10. D. Economou and P.G. Taylor, A Continuous Approximation for Segmentation and Reassembly Buffer Occupancy Distribution in a Cyclic Queue, *Proceedings of the ITC Specialists' Seminar - Telecommunications Services for Developing Economies*, Krakow April 1991, 220-231.
11. W. Henderson and P.G. Taylor, Some New Results on Queueing Networks with Batch Movement, *Journal of Applied Probability*, **28**, (1991) 409-421.
12. A.J. Coyle and P.G. Taylor, Bounds on the Sensitivity of Processes with a Single Generally Distributed Lifetime, *Mathematics of Operations Research*, **17**, (1992) 132-148.
13. W. Henderson and P.G. Taylor, Discrete Time Queueing Networks with Geometric Release Probabilities, *Advances in Applied Probability*, **24**, (1992) 229-233.
14. N.M. van Dijk and P.G. Taylor, An Error Bound for Approximating Discrete Time Servicing with a Continuous Time Modification, *Stochastic Models*, **8**, (1992) 651-664.
15. P.G. Taylor, Algebraic Criteria for Extended Product Form in Generalised Semi-Markov Processes, *Stochastic Processes and their Applications*, **42**, (1992) 269-282.
16. W. Henderson and P.G. Taylor, Insensitivity in Discrete Time Queues with a Moving Server, *Queueing Systems*, **11**, (1992) 273-297.
17. W. Henderson, C.E.M. Pearce, P.K. Pollett and P.G Taylor, Connecting Internally Balanced Quasireversible Markov Processes, *Advances in Applied Probability*, **24**, (1992) 934-959.
18. R. Boucherie and P.G. Taylor, Transient Product Form Distributions in Queueing Networks, *Discrete Event Dynamical Systems*, **3**, (1993) 375-396.
19. P.K. Pollett and P.G. Taylor, On the Problem of Establishing the Existence of Stationary Distributions for Continuous-Time Markov Chains, *Probability in Engineering and Informational Science*, **7**, (1993) 529-543.
20. A.J. Coyle, W. Henderson and P.G. Taylor, Reduced Load Approximations for Loss Networks, *Telecommunications Systems*, **2**, (1993) 21-50.
21. W. Henderson, B.S. Northcote and P.G. Taylor, Geometric Equilibrium Distributions for Networks of Queues with Interactive Batch Departures, *Annals of Operations Research*, **48** (1), (1994) 493-511.

22. W. Henderson, B.S. Northcote and P.G. Taylor, State Dependent Signalling in Queueing Networks, *Advances in Applied Probability*, **26**, (1994) 436–455.
23. J.L. Coleman, W. Henderson and P.G. Taylor, A Convolution Algorithm for Resource Allocation Problems with Moderate User Interference, *IEEE Transactions in Communications*, **42**, (1994) 1106–1111.
24. W. Henderson, B.S. Northcote and P.G. Taylor, Networks of Customer Queues and Resource Queues, *Proceedings of the 14th International Teletraffic Congress*, Antibes Juan les Pins, June 1994.
25. E. Chlebus, A.J. Coyle, W. Henderson, C.E.M. Pearce and P.G. Taylor, Mean Value Analysis for Examining Call Admission Control Thresholds in Multi-service Networks, *Proceedings of the 14th International Teletraffic Congress*, Antibes Juan les Pins, June 1994.
26. D.L. Pallant and P.G. Taylor, Approximation of Performance Measures in Cellular Mobile Networks with Dynamic Channel Allocation, *Telecommunications Systems*, **3**, (1994) 129–163.
27. A.J. Coyle, W. Henderson, C.E.M. Pearce and P.G. Taylor, A General Formulation for Mean Value Analysis in Product Form Batch Movement Queueing Networks, *Queueing Systems*, **16**, (1994) 363–372.
28. D.L. Pallant and P.G. Taylor, Modelling Handovers in Cellular Mobile Networks with Dynamic Channel Allocation, *Operations Research*, **43**, (1995) 33–42.
29. A.J. Coyle and P.G. Taylor, Tight Bounds for the Sensitivity of Generalised Semi-Markov Processes with a Single Generally Distributed Lifetime, *Journal of Applied Probability*, **32**, (1995) 63–73.
30. N.G. Bean and P.G. Taylor, Maximal Profit Dimensioning and Tariffing of Loss Networks, *Probability in Engineering and Informational Science*, **9**, (1995) 323–340.
31. F. Callegati and P.G. Taylor, On Dynamic Channel Allocation in Urban Cellular Networks, *Australian Teletraffic Research*, **29**, (1995) 39–42.
32. L.W. Bright and P.G. Taylor, Calculating The Equilibrium Distribution In Level Dependent Quasi-birth-and-death Processes, *Stochastic Models*, **11**, (1995) 497–526.
33. A.J. Coyle, W. Henderson, C.E.M. Pearce and P.G. Taylor, Mean-Value Analysis for a Class of Petri Nets and Batch-Movement Queueing Networks with Product-Form Equilibrium Distributions, *Mathematics and Computational Modelling*, **22**, (1995) 27–34.

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34. W. Henderson, C.E.M. Pearce, P.G. Taylor and N.M. van Dijk, Insensitivity in Discrete Time Generalised Semi-Markov Processes, *Annals of Applied Probability*, **5**, (1995) 78–96.
 35. W. Henderson, B.S. Northcote and P.G. Taylor, Triggered Batch Movement in Queueing Networks, *Queueing Systems*, **21**, (1995) 125–141.
 36. L.W. Bright and P.G. Taylor, Equilibrium Distributions for Level-Dependent Quasi-Birth-and-Death Processes, in *Matrix-Analytic Methods in Stochastic Models*, Lecture Notes in Pure and Applied Mathematics, **183**, eds. S.R. Chakravorthy and A.S. Alfa, Marcel Dekker 1996.
 37. V. Ramaswami and P.G. Taylor, Some Properties of the Rate Matrices in Level Dependent Quasi-Birth-and-Death Processes with a Countable Number of Phases, *Stochastic Models*, **12**, (1996) 143–164.
 38. V. Ramaswami and P.G. Taylor, An Operator Geometric Approach to Product Form Networks, *Stochastic Models*, **12**, (1996) 121–142.
 39. J.L. Coleman, W. Henderson and P.G. Taylor, Product Form Equilibrium Distributions and a Convolution Algorithm for Stochastic Petri Nets, *Performance Evaluation*, **26**, (1996) 159–180.
 40. N.G. Bean, F.P. Kelly and P.G. Taylor, Braess’s Paradox in a Loss Network, *Journal of Applied Probability*, **34**, (1997) 155–159.
 41. J.L. Coleman, W. Henderson, C.E.M. Pearce and P.G. Taylor, The Correspondence Between Product Form Batch Movement Queueing Networks And Single Movement Networks, *Journal of Applied Probability*, (1997) **34**, 160–175.
 42. M. Miyazawa and P.G. Taylor, A Geometric Product-Form Distribution for a Queueing Network with Nonstandard Batch Arrivals and Batch Transfers, *Advances in Applied Probability*, **29**, (1997) 523–544.
 43. N.G. Bean, L Bright, G Latouche, C.E.M Pearce, P.K. Pollett and P.G. Taylor, The Quasistationary Behaviour of Quasi-Birth-and-Death Processes, *Annals of Applied Probability*, **7**, (1997) 134–155.
 44. S.A. Berezner, A.E. Krzesinski and P.G. Taylor, On the Inverse of Erlang’s Function, *Journal of Applied Probability*, **35**, (1998) 1–7.
 45. G. Latouche, C.E.M. Pearce and P.G. Taylor, Invariant Measures for Quasi-Birth-and-Death Processes, *Stochastic Models*, **14** (Special Issue in Honour of Marcel Neuts), (1998) 443–460.

46. N.G. Bean, P.K. Pollett and P.G. Taylor, The Quasistationary Distributions of Level-Independent Quasi-Birth-and-Death Processes, *Stochastic Models*, **14** (Special Issue in Honour of Marcel Neuts), (1998) 389–406.
47. N.G. Bean, G. Latouche and P.G. Taylor, Quasi-Reversibility and Quasi-Birth-and-Death Processes, *Advances in Matrix Analytic Methods for Stochastic Models*, The Proceedings of the Second International workshop on Matrix-Analytic Methods, Winnipeg July 24-25, 1998, eds. S.R. Chakravorthy and A.S. Alfa, Notable Publications, New Jersey, 115–134.
48. N.G. Bean, D.A. Green and P.G. Taylor, Approximations to the Output Processes of $MAP/M/1$ Queues, *Advances in Matrix Analytic Methods for Stochastic Models*, The Proceedings of the Second International workshop on Matrix-Analytic Methods, Winnipeg July 24-25, 1998, eds. S.R. Chakravorthy and A.S. Alfa, Notable Publications, New Jersey, 151–170.
49. N.G. Bean and J-M. Li and P.G. Taylor, Some Asymptotic Properties of Two-Stage Tandem Networks of $Ph/Ph/1$ Queues, *Advances in Matrix Analytic Methods for Stochastic Models*, The Proceedings of the Second International workshop on Matrix-Analytic Methods, Winnipeg July 24-25, 1998, eds. S.R. Chakravorthy and A.S. Alfa, Notable Publications, New Jersey, 171–194.
50. P.G. Taylor and N.M. van Dijk, Strong Stochastic Bounds for the Stationary Distribution of a Class of Multicomponent Models, *Operations Research*, **46**, (1998) 665–674.
51. S.A. Berezner, A.E. Krzesinski and P.G. Taylor, A Product-Form “ Loss Network” with a Form of Queueing, *Journal of Applied Probability*, **34**, (1998) 1075–1078.
52. M.A. Stewart and P.G. Taylor, Circuit Reservation for Links Shared by Different Operating Companies, in *Proceedings of EMAC '98*, Third Biennial Engineering Mathematics and Applications Conference, Adelaide, Australia, 13-16 July 1998, eds. E.O. Tuck and J.A.K. Stott, The Institution of Engineers, Australia, 467–470.
53. S.A. Berezner, J.M. de Kock, A.E. Krzesinski and P.G. Taylor, Local Reconfiguration of ATM Virtual Path Connection Networks, *Broadband Communications: Convergence of Network Technologies*, - Proceedings of IFIP Fifth International Conference on Broadband Communications, Hong Kong, 10-12 November 1999, eds. Danny H.K. Tsang and Paul J. Kuhn, Kluwer Academic Publishers, 621–630.
54. N.G. Bean, D.A. Green and P.G. Taylor, The Output Process of an $MMPP/M/1$ Queue, *Journal of Applied Probability*, **35**, (1998) 998–1002.
55. G.P. Harmer, D.A. Abbott, P.G. Taylor and J.M.R. Parrondo, Brownian Ratchets and Parrondo’s Games, *Chaos*, **11**, (2001) 705–714. An earlier version appeared as Parrondo’s Paradoxical Games and the Discrete Brownian Ratchet, *Proceedings of*

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- Upon'99*, The Second International Conference on Unsolved Problems of Noise and Fluctuations, University of Adelaide, July 12-16, 1999, eds. D.A. Abbott and L.B. Kish, American Institute of Physics, Melville, New York **511** (2000) 189–200.
56. G.P. Harmer, D.A. Abbott and P.G. Taylor, The Paradox of Parrondo's Games, *Proceedings of the Royal Society of London: Series A*, **456**, (2000) 247–260.
57. G.P. Harmer, D.A. Abbott, P.G. Taylor, C.E.M. Pearce and J.M.R. Parrondo, Information Entropy and Parrondo's Discrete-Time Ratchet, in *Stochastic and Chaotic Dynamics in the Lakes (Stochaos)* eds. D.S. Broomhead, E.A. Luchinskaya, P.V.E. McClintock and T. Mullin, American Institute of Physics, Melville, New York, (2000) **502**, 544–549.
58. P.G. Taylor, Quasi-Reversibility and Networks of Queues with Non-Standard Batch Movements, *Mathematics and Computational Modelling*, **31**, (2000) 335–341.
59. N.G. Bean, D.R. Brown and P.G. Taylor, Maximal Profit Dimensioning and Tariffing of Loss Networks with Cross-Connects, *Mathematics and Computational Modelling*, **31**, (2000) 21–30.
60. Å. Arvidsson, J.M. de Kock, A.E. Krzesinski and P.G. Taylor, The Design of ATM Virtual Path Connection Networks with Service Separation, *Proceedings of MAS-COTS'2000*, The Eighth International Symposium on Modeling, Analysis, and Simulation of Computer and Telecommunication Systems, San Francisco, USA, September 2000, 424–431.
61. N.G. Bean and J-M. Li and P.G. Taylor, Caudal Characteristics of QBDs with Decomposable Phase Spaces, in *Advances in Algorithmic Methods for Stochastic Models*, eds. G Latouche and P.G. Taylor, Notable Publications, New Jersey, (2000) 37–56.
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