

ADVANCES IN APPLIED PROBABILITY
VOLUME 15 (1983): INDEX

	PAGE
ALBRECHT, P. A note on a limiting behaviour of the occurrence times of a mixed Poisson process (letter to the editor)	460
AVEN, T. Optimal replacement under a minimal repair strategy—a general failure model.....	198–211
BARBOUR, A. D. AND EAGLESON, G. K. Poisson approximation for some statistics based on exchangeable trials	585–600
BARTOSZYŃSKI, R. AND PURI, P. S. On two classes of interacting stochastic processes arising in cancer modeling	695–712
BECKER, G. AND KERSTING, G. Design problems for the pure birth process	255–273
BERMAN, M. AND WESTCOTT, M. On queueing systems with renewal departure processes.....	657–673
BEUTLER, F. J. A note on multivariate Poisson flows on stochastic processes (letter to the editor).....	219–220
BLOM, G. The mean waiting time to a repetition (letter to the editor)	216–218
BORDES, G. AND ROEHNER, B. Application of Stieltjes theory for S-fractions to birth and death processes	507–530
BORGES, W. S. On the limiting distribution of the failure time of fibrous materials	331–348
BOXMA, O. J. The cyclic queue with one general and one exponential server	857–873
BUCKLEY, M. J. AND SENETA, E. On Arnold's treatment of Moran's bounds (letter to the editor).....	212–213
CONOLLY, B. W. More transient results for generalised state-dependent Erlangian queues (letter to the editor).....	688–690
DERRIENNIC, Y. A remark on the time constant in first-passage percolation (letter to the editor)	214–215
DE SMIT, J. H. A. The queue $GI/M/s$ with customers of different types or the queue $GI/H_m/s$	392–419
DESHPANDE, J. V. AND KOCHAR, S. C. Dispersive ordering is the same as tail-ordering (letter to the editor).....	686–687
DISNEY, R. L. <i>See under</i> FOLEY, R. D.	
EAGLESON, G. K. <i>See under</i> BARBOUR, A. D.	
FOLEY, R. D. AND DISNEY, R. L. Queues with delayed feedback.....	162–182
GLAZEBROOK, K. D. Some reward-penalty rules for the multi-armed bandit problem which are asymptotically optimal (letter to the editor)	221–222
GUPTA, V. K. <i>See under</i> WAYMIRE, E.	
HENDERSON, W. Insensitivity and reversed Markov processes	752–768
HOLLEY, R. Two types of mutually annihilating particles.....	133–148
HORDIJK, A. AND VAN DER DUYN SCHOUTEN, F. A. Average optimal policies in Markov decision drift processes with applications to a queueing and a replacement model	274–303
HOVEY, P. W. AND PURDUE, P. An inventory system with both delayed and immediate delivery (letter to the editor)	691–694
HUNTER, J. J. Filtering of Markov renewal queues, I: feedback queues	349–375
——— Filtering of Markov renewal queues, II: Birth-death queues.....	376–391
IGLEHART, D. L. AND SHEDLER, G. S. Statistical efficiency of regenerative simulation methods for networks of queues.....	183–197

	PAGE
IVANOFF, B. G. The critical branching diffusion in a varying environment	488–506
JO, K. Y. AND STIDHAM, S., JR. Optimal service-rate control of $M/G/1$ queueing systems using phase methods.....	616–637
KARATZAS, I. A class of singular stochastic control problems	225–254
KARLIN, S. AND LIBERMAN, U. Measuring interference in the chiasma renewal formation process.....	471–487
KASPI, H. AND PERRY, D. Inventory systems of perishable commodities	674–685
KEILSON, J. AND SUMITA, U. Evaluation of the total time in system in a preempt/resume priority queue via a modified Lindley process	840–856
—— The depletion time for $M/G/1$ systems and a related limit theorem	420–443
KELLY, F. P. AND POLLETT, P. K. Sojourn times in closed queueing networks.....	638–656
KERSTING, G. <i>See under</i> BECKER, G.	
KIMMEL, M. The point-process approach to age- and time-dependent branching processes.....	1–20
KOCHAR, S. C. <i>See under</i> DESHPANDE, J. V.	
KUCZEK, T. On the $GA/G/\infty$ queue.....	444–459
KÜNSCH, H. Asymptotically unbiased inference for Ising models (letter to the editor)	887–888
LIBERMAN, U. <i>See under</i> KARLIN, S.	
LYNCH, J., MIMMACK, G. AND PROSCHAN, F. Dispersive ordering results (letter to the editor).....	889–891
MARSHALL, A. W. AND SHAKED, M. New better than used processes	601–615
MASRY, E. Non-parametric covariance estimation from irregularly-spaced data	113–132
MCDIARMID, C. General first-passage percolation	149–161
MIMMACK, G. <i>See under</i> LYNCH, J.	
MITRA, D. AND MORRISON, J. A. Asymptotic expansions of moments of the waiting time in closed and open processor-sharing systems with multiple job classes....	813–839
MİYAZAWA, M. The derivation of invariance relations in complex queueing systems with stationary inputs	874–885
MORRISON, J. A. <i>See under</i> MITRA, D.	
NATVIG, B. Correction to <i>Adv. Appl. Prob.</i> 14 , 434–455	223
NEWMAN, C. M., RINOTT, Y. AND TVERSKY, A. Nearest neighbors and Voronoi regions in certain point processes.....	726–757
PELIGRAD, M. A note on two measures of dependence and mixing sequences (letter to the editor).....	461–464
PERRY, D. <i>See under</i> KASPI, H.	
PFEIFER, D. A note on the occurrence times of a Pólya–Lundberg process (letter to the editor).....	886
PICKANDS, J., III. Extreme order statistics with cost of sampling.....	783–797
POLLETT, P. K. <i>See under</i> KELLY, F. P.	
PONTIER, M. AND SZPIRGLAS, J. Arrêt optimal avec contrainte	798–812
PRAKASA RAO, B. L. S. Characterization of stochastic processes by stochastic integrals.....	81–98
PROSCHAN, F. <i>See under</i> LYNCH, J.	
PURDUE, P. <i>See under</i> HOVEY, P. W.	
PURI, P. S. <i>See under</i> BARTOSZYŃSKI, R.	
RAVASKA, T. On analytical methods for incomplete Markov random fields.....	99–112
RINOTT, Y. <i>See under</i> NEWMAN, C. M.	
ROEHNER, B. <i>See under</i> BORDES, G.	
ROOTZÉN, H. The rate of convergence of extremes of stationary normal sequences	54–80
RUBEN, H. Correction to <i>Adv. Appl. Prob.</i> 13 (1981) 704–719	223

	PAGE
SAMUEL-CAHN, E. Simple approximations to the expected waiting time for a cluster of any given size, for point processes	21–38
SENETA, E. <i>See under</i> BUCKLEY, M. J.	
SHAKED, M. <i>See under</i> MARSHALL, A. W.	
SHEDLER, G. S. <i>See under</i> IGLEHART, D. L.	
SMITH, R. L. Limit theorems and approximations for the reliability of load-sharing systems	304–330
STEUTEL, F. W. VERVAAT, W. AND WOLFE, S. J. Integer-valued branching processes with immigration	713–725
STIDHAM, S., JR. <i>See under</i> JO, K. Y.	
SUMITA, U. <i>See under</i> KEILSON, J.	
SZPIRGLAS, J. <i>See under</i> PONTIER, M.	
THORISSON, H. The coupling of regenerative processes	531–561
TIERNEY, L. The hazards of optimal proofreading (letter to the editor)	892–893
TJØSTHEIM, D. Statistical spatial series modelling II: Some further results on unilateral lattice processes	562–584
TSOUCAS, P. AND WALRAND, J. A note on the processor-sharing queue in a quasi-reversible network (letter to the editor).....	468–469
TVERSKY, A. <i>See under</i> NEWMAN, C. M.	
VAN DEN BERG, J. A counter-example to a conjecture of J. M. Hammersley and D. J. A. Welsh concerning first-passage percolation (letter to the editor)	465–467
VAN DER DUYN SCHOUTEN <i>See under</i> HORDIJK, A.	
VERVAAT, W. <i>See under</i> STEUTEL, F. W.	
WALRAND, J. <i>See under</i> TSOUCAS, P.	
WAYMIRE, E. AND GUPTA, V. K. An analysis of the Pólya point process	39–53
WESTCOTT, M. <i>See under</i> BERMAN, M.	
WHITTLE, P. Relaxed Markov processes	769–782
WOLFE, S. J. <i>See under</i> STEUTEL, F. W.	

SUBSCRIPTION RATES

Subscription rates (post free) for the 1983 volume of *Advances* are as follows:

Subscribers in North, Central and South America, and Australia:

US\$114.00, \$A102.00, £60.00 for libraries and institutions;

US\$38.00 \$A34.00, £20.00 for individuals belonging to a recognised scientific society.

All other subscribers:

£51.00 for libraries and institutions;

£17.00 for individuals belonging to a recognised scientific society.

All enquiries about *Advances*, as well as other subscriptions, should be sent to the Executive Editor, Miss M. Hitchcock, Department of Probability and Statistics, The University, Sheffield S3 7RH, England. The price of back numbers varies from volume to volume, and enquiries should be sent to the Executive Editor. Cheques, money orders, etc. should be made out to *Applied Probability*; cheques on U.S., U.K. and Australian banks will be acceptable.

NOTES FOR CONTRIBUTORS

Contributions published in *Advances* may be of six kinds:

(1) *review papers*; (2) *longer research papers* in applied probability, which may include expository material; (3) *expository papers* on branches of mathematics of interest to probabilists; (4) *papers outlining areas in the biological, physical, social and technological sciences* in which probability models can usefully be developed; (5) *papers in applied probability presented at conferences* which do not publish their proceedings; (6) *letters to the editor* on any appropriate topic in applied probability. (Note: Letters relating specifically to papers which have appeared in the *Journal of Applied Probability* will continue to be published in the *Journal*.)

Research papers not exceeding 20 printed pages and *short communications* are published in the *Journal of Applied Probability*. The editors may publish accepted papers in either journal, according to the space available, in order to meet the 15-month deadline in publication referred to below.

Submission of papers

It is a condition of publication in *Advances in Applied Probability* that papers shall not previously have appeared elsewhere, and will not be reprinted without the written permission of the Trust. It is the policy of *Advances* not to accept for publication papers which cannot appear in print within 15 months of the date of receipt of the final version. Authors will receive 50 reprints of their papers free, and joint authors a proportional share of this number. Additional reprints will be provided at cost.

Papers should be written in English or French; papers in other languages may be accepted by the editors, but will appear (subject to the author's agreement) in English or French translation in *Advances*. Scripts should be typewritten, using double spacing, and at least one copy should be on one side of the paper only. Each paper should be accompanied by

(i) a short abstract of approximately 4–10 lines giving a non-mathematical description of the subject matter and results;

(ii) a list of keywords detailing the contents for the purpose of computerised information retrieval.

Authors are advised to consult *The Author's Guide to the Applied Probability Journals* when preparing papers for submission. A copy of this guide may be obtained on application to the Applied Probability Office.

For efficiency in processing, authors are requested to send three copies of all submissions to the Applied Probability Office in Sheffield, rather than to individual editors. Authors overseas are asked to ensure that their submissions are sent by airmail. The Editor-in-Chief and the Applied Probability Office are in regular contact and full details of all papers submitted are available to Professor Gani in Lexington.

Copyright

The copyright of all published papers shall be vested in the Trust. When a paper is accepted for publication, the Trust requests the author(s) to sign a form assigning copyright to the Trust. Failure to do this promptly may delay or prevent publication.

Authorisation to photocopy items for internal or personal use, or the internal or personal use of specific clients, is granted by the Applied Probability Trust for libraries and other users registered with the Copyright Clearance Center (CCC) Transactional Reporting Service, provided that the base fee of \$00.50 per copy, plus .10 per page is paid directly to CCC, 21 Congress St., Salem, MA 01970, U.S.A. 0001-8678/83 \$00.50+ .10.

- 695 ROBERT BARTOSZYŃSKI AND PREM S. PURI. On two classes of interacting stochastic processes arising in cancer modeling
- 713 F. W. STEUTEL, W. VERVAAT AND S. J. WOLFE. Integer-valued branching processes with immigration
- 726 C. M. NEWMAN, Y. RINOTT AND A. TVERSKY. Nearest neighbors and Voronoi regions in certain point processes
- 752 W. HENDERSON. Insensitivity and reversed Markov processes
- 769 P. WHITTLE. Relaxed Markov processes
- 783 JAMES PICKANDS III. Extreme order statistics with cost of sampling
- 798 MONIQUE PONTIER AND JACQUES SZPIRGLAS. Arrêt optimal avec contrainte
- 813 DEBASIS MITRA AND J. A. MORRISON. Asymptotic expansions of moments of the waiting time in closed and open processor-sharing systems with multiple job classes
- 840 J. KEILSON AND U. SUMITA. Evaluation of the total time in system in a preempt/resume priority queue via a modified Lindley process
- 857 O. J. BOXMA. The cyclic queue with one general and one exponential server
- 874 MASAKIYO MIYAZAWA. The derivation of invariance relations in complex queueing systems with stationary inputs
- Letters to the editor*
- 886 DIETMAR PFEIFER. A note on the occurrence times of a Pólya-Lundberg process
- 887 H. KÜNSCH. Asymptotically unbiased inference for Ising models
- 889 JAMES LYNCH, GILLIAN MIMMACK AND FRANK PROSCHAN. Dispersive ordering results
- 892 LUKE TIERNEY. The hazards of optimal proofreading