

### Subscription rates

Subscription rates for volume **41** (2004) of *Journal of Applied Probability* are as follows (post free and including online access at <http://projecteuclid.org/jap>):

US\$240.00; \$A390.00; £150.00 for libraries and institutions;

US\$80.00; \$A130.00; £50.00 for individuals belonging to a recognised scientific society.

Members of the London Mathematical Society should apply direct to the Society for subscription to the *Journal*. The subscription rates for volume **36** (2004) of *Advances in Applied Probability*, the companion publication, are the same; if both journals are ordered directly from the Applied Probability office at the same time, the combined price is discounted by 10%. Please send all enquiries to: Applied Probability Subscriptions, School of Mathematics and Statistics, University of Sheffield, Sheffield S3 7RH, UK (telephone +44 114 222 3922, fax +44 114 272 9782, email [s.c.boyles@sheffield.ac.uk](mailto:s.c.boyles@sheffield.ac.uk)). Cheques, money orders, etc. should be made payable to 'Applied Probability'. Payment is acceptable in US, Australian or UK currency or by Visa or Mastercard. We can provide back issue prices on application.

### Notes for contributors

Papers published in *Journal of Applied Probability* are of two kinds:

- (i) *research papers* not exceeding 20 printed pages;
- (ii) *short communications* of a few printed pages in the nature of notes or brief accounts of work in progress.

*Letters* relating specifically to papers which have appeared in *Journal of Applied Probability* will also be published. *Review papers*, *longer research papers* and *letters to the Editor* are published in *Advances in Applied Probability*, a companion publication.

It is the policy not to accept for publication papers which cannot appear in print within 15 months of the date of receipt of the final version; in order to meet this deadline, an accepted paper may be published in either journal, according to the space available.

Fifty offprints of each paper will be provided free; additional offprints are available at cost.

Papers submitted to the Applied Probability journals are considered on the understanding that they have not been published previously and are not under consideration by another publication. Accepted papers will not be published elsewhere without the written permission of the Trust. Papers should be written in English or French; papers in other languages may be accepted, but will appear (subject to the author's agreement) in English or French translation.

Papers should include: (i) a short abstract of 4–10 lines giving a non-mathematical description of the subject matter and results; (ii) a list of keywords detailing the contents; (iii) classifications according to the 2000 Mathematics Subject Classification. Letters to the Editor need not include these.

To assist authors in writing papers in the Applied Probability style, they may use the LATEX class file `aptpub.cls`, which may be obtained from <http://www.appliedprobability.org/>. Use of this class file is not a condition of submission. For instruction on how papers may be submitted electronically, please consult the notes for contributors at the above URL.

All submission should be sent to the Applied Probability office in Sheffield, rather than to individual editors. Three copies of the paper, at least one of which should be double spaced, should be sent to:

**Executive Editor, Applied Probability, School of Mathematics and Statistics,  
University of Sheffield, Sheffield S3 7RH, UK.**

### Copyright

The copyright of all published papers is vested in the Applied Probability Trust. When a paper is accepted for publication, the Trust asks the authors to assign copyright by signing a form in which the terms of copyright are listed. 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 \$0.70 per copy plus 0.20 per page is paid directly to CCC, 222 Rosewood Drive, Danvers, MA 01923, USA (<http://www.copyright.com>). 0021-9002/04 \$0.70+0.20.

Printed in Israel by N. Ben-Zvi Printing Enterprises Ltd., Jerusalem.

*Research Papers*

- 601 CLAUDIA KLÜPPELBERG, ALEXANDER LINDNER AND ROSS MALLER. A continuous-time GARCH process driven by a Lévy process: stationarity and second-order behaviour
- 623 MARK M. MEERSCHAERT AND HANS-PETER SCHEFFLER. Limit theorems for continuous-time random walks with infinite mean waiting times
- 639 ASSAF ZEEVI AND PETER W. GLYNN. Recurrence properties of autoregressive processes with super-heavy-tailed innovations
- 654 BERNARD WONG AND C. C. HEYDE. On the martingale property of stochastic exponentials
- 665 W. STADJE AND S. ZACKS. Telegraph processes with random velocities
- 679 MILJENKO HUZAK, MIHAEL PERMAN, HRVOJE ŠIKIĆ AND ZORAN VONDRAČEK. Ruin probabilities for competing claim processes
- 691 YULIY BARYSHNIKOV, E. G. COFFMAN, JR AND PREDRAG JELENKOVIĆ. Space filling and depletion
- 703 OWEN DAFYDD JONES. Large deviations for supercritical multitype branching processes
- 721 YIBEI LING AND JIE MI. An optimal trade-off between content freshness and refresh cost
- 735 NADER EBRAHIMI. Burn-in and covariates
- 746 GUY LATOUCHE AND TETSUYA TAKINE. Markov-renewal fluid queues
- 758 LANDY RABEHASAINA AND BRUNO SERICOLA. A second-order Markov-modulated fluid queue with linear service rate
- 778 ZHENTING HOU AND YUANYUAN LIU. Explicit criteria for several types of ergodicity of the embedded M/G/1 and GI/M/n queues
- 791 H. AYHAN, Z. PALMOWSKI AND S. SCHLEGEL. Cyclic queueing networks with subexponential service times
- 802 GORDON E. WILLMOT AND JUN CAI. On applications of residual lifetimes of compound geometric convolutions
- 816 AIDAN SUDBURY. The annihilating process on random trees and the square lattice
- 832 FABRICE GUILLEMIN AND DIDIER PINCHON. Analysis of generalized processor-sharing systems with two classes of customers and exponential services
- 859 SHANE G. HENDERSON AND BURT SIMON. Adaptive simulation using perfect control variates
- 877 MIREILLE BOSSY, EMMANUEL GOBET AND DENIS TALAY. A symmetrized Euler scheme for an efficient approximation of reflected diffusions
- 890 KATARZYNA HORBACZ. Random dynamical systems with jumps

*Short Communications*

- 911 ROBERT LUND, WILLIAM P. McCORMICK AND YUANHUI XIAO. Limiting properties of Poisson shot noise processes
- 919 M. IVETTE GOMES, LAURENS DE HAAN AND DINIS PESTANA. Joint exceedances of the ARCH process
- 927 XIAOHU LI. Some properties of ageing notions based on the moment-generating-function order

*Letter to the Editor*

- 935 GER KOOLE. A formula for tail probabilities of Cox distributions