

JOURNAL OF APPLIED PROBABILITY

VOLUME 40 NUMBER 3 SEPTEMBER 2003



EDITOR-IN-CHIEF C. C. HEYDE

FOUNDING EDITOR (1964–1989) J. GANI

JOURNAL OF APPLIED PROBABILITY

This is an international journal published by the Applied Probability Trust in association with the London Mathematical Society; it contains research papers and notes on applications of probability theory to the biological, physical, social and technological sciences. An annual volume of up to 1200 pages is published in four issues appearing in March, June, September and December.

EDITORIAL BOARD

Editor-in-Chief C. C. HEYDE (Columbia University and Australian National University)

Coordinating Editors N. H. BINGHAM (University of London)
M. F. NEUTS (University of Arizona)

Editors R. J. ADLER (Technion, Haifa)
A. J. BADDELEY (University of Western Australia)
P. BRÉMAUD (ENS, Paris, and EPFL, Lausanne)
C. CANNINGS (University of Sheffield)
E. ÇINLAR (Princeton University)
D. J. DALEY (Australian National University)
P. J. DONNELLY (University of Oxford)
P. EMBRECHTS (ETH, Zürich)
A. HORDIJK (Universiteit Leiden)
P. JAGERS (Chalmers University of Technology and Göteborgs Universitet)
S. JANSON (Uppsala Universitet)
G. KERSTING (Johann Wolfgang Goethe-Universität, Frankfurt am Main)
J. F. C. KINGMAN (Isaac Newton Institute, Cambridge)
C. KLÜPPELBERG (Technische Universität München)
T. MIKOSCH (Københavns Universitet)
S. I. RESNICK (Cornell University)
L. C. G. ROGERS (University of Cambridge)
J. L. TEUGELS (Katholieke Universiteit Leuven)
D. VERE-JONES (Victoria University of Wellington)
R. R. WEBER (University of Cambridge)
W. WHITT (Columbia University)

EDITORIAL OFFICE

Executive Editor L. J. NASH (University of Sheffield)
Production Editor D. A. CRUICKSHANK (University of Sheffield)

All correspondence relating to the submission of papers should be sent to: The Executive Editor, Applied Probability, School of Mathematics and Statistics, University of Sheffield, Sheffield S3 7RH, UK. Subscription rates and notes for contributors are to be found on the inside back cover.

FORTHCOMING PAPERS
JOURNAL OF APPLIED PROBABILITY

E. D. ANDJEL. Stochastic order for invariant measures of the contact process

ARUP BOSE, SREELA GANGOPADHYAY, ANISH SARKAR AND ARINDAM SENGUPTA. Convergence of lower records and infinite divisibility

PETER CAITHAMER. Large and small deviations of a string driven by a two parameter Gaussian noise white in time

JOHN T. CHEN. A lower bound using Hamilton-type circuits and its applications

YOURI DAVYDOV AND RICARDAS ZITIKIS. Generalized Lorenz curves and convexifications of stochastic processes

ANTONIS ECONOMOU. On the stochastic domination for batch-arrival batch-service and assemble-transfer queueing networks

ERIC FONTENAS AND OLIVIER FRANÇOIS. Improved bounds for the large time behaviour of simulated annealing

VALERIE GIRARDIN AND NIKOLAOS LIMNIOS. On the entropy for semi-Markov processes

M. GONZÁLEZ, M. MOLINA AND I. DEL PUERTO. On the geometric growth in controlled branching processes with random control function

QI-MING HE. The classification of Markov chains of matrix GI/M/1 type with a tree structure and its queueing applications

PER HÖRFELT. Geometric bounds on certain sublinear functionals of geometric Brownian motion

DAVAR KHOSHNEVISAN AND THOMAS M. LEWIS. Optimal reward on a sparse tree with random edge-weights

ARTURO KOHATSU-HIGA AND MAKOTO YAMAZATO. On moments and tail behaviours of storage processes

AIKO KURUSHIMA AND KATSUNORIO. A note on the full-information Poisson arrival selection problem

YEH LAM. An inspection-repair-replacement model for a deteriorating system with unobservable state

HAIJUN LI AND MOSHE SHAKED. Imperfect repair models with preventive maintenance

CHUNSHENG MA. Long memory continuous-time correlation models

A. YU. MITROPHANOV. Stability and exponential convergence of continuous-time Markov chains

JOHANNES MÜLLER AND MARTIN MÖHLE. Family trees of continuous-time birth-and-death processes

CHRISTINE REDER. Transient behaviour of a Galton–Watson process with a large number of types

SERIK SAGITOV. Convergence to the coalescent with simultaneous multiple mergers

MICHAEL SCHRÖDER. Brownian excursions and Parisian barrier options: a note

VALERI T. STEFANOV. The intersite distances between pattern occurrences in strings generated by general discrete- and continuous-time models: an algorithmic approach