

JOURNAL OF APPLIED PROBABILITY

VOLUME 50

NUMBER 1

MARCH 2013



EDITOR-IN-CHIEF (2005–) **S. ASMUSSEN**

FOUNDING EDITOR (1964–1989) **J. GANI**

PAST EDITOR-IN-CHIEF (1990–2007) **C. C. HEYDE**

JOURNAL OF APPLIED PROBABILITY

This is an international journal published by the Applied Probability Trust; 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* S. ASMUSSEN (Aarhus University)
- Coordinating Editors* O. J. BOXMA (Eindhoven University of Technology)
P. JAGERS (Chalmers University of Technology and University of Gothenburg)
- Editors* H. ALBRECHER (University of Lausanne)
T. AVEN (University of Stavanger)
F. BACCELLI (ENS, Paris)
N. BÄUERLE (Universität Karlsruhe)
J. D. BIGGINS (University of Sheffield)
J. BLANCHET (Columbia University)
F. T. BRUSS (Université Libre de Bruxelles)
D. J. DALEY (Australian National University)
P. A. FERRARI (University of São Paulo)
S. FOSS (Heriot-Watt University and Sobolev Institute of Mathematics)
P. W. GLYNN (Stanford University)
A. V. GNEDIN (Queen Mary, University of London)
X. P. GUO (Zhongshan University)
O. HÄGGSTRÖM (Chalmers University of Technology)
F. C. KLEBANER (Monash University)
S. G. KOU (Columbia University)
A. E. KYPRIANOU (University of Bath)
H. M. MAHMOUD (The George Washington University)
M. R. H. MANDJES (University of Amsterdam)
T. MIKOSCH (University of Copenhagen)
M. MÖHLE (Eberhard Karls University of Tübingen)
A. MÜLLER (University of Siegen)
G. REINERT (University of Oxford)
L. C. G. ROGERS (University of Cambridge)
L. RÜSCHENDORF (University of Freiburg)
G. SAMORODNITSKY (Cornell University)
M. SCARSINI (LUISS)
M. SCHWEIZER (ETH, Zürich)
J. SEGERS (Université Catholique de Louvain)
A. L. STOLYAR (Alcatel-Lucent)
P. G. TAYLOR (University of Melbourne)
R. VAN DER HOFSTAD (Eindhoven University of Technology)

EDITORIAL OFFICE

- Executive Editor* L. J. NASH (University of Sheffield)
Production Editor E. TALIB (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.

JOURNAL OF APPLIED PROBABILITY

VOLUME 50

2013



EDITOR-IN-CHIEF (2005–) **S. ASMUSSEN**

FOUNDING EDITOR (1964–1989) **J. GANI**

PAST EDITOR-IN-CHIEF (1990–2007) **C. C. HEYDE**

Published by the **Applied Probability Trust**

© 2013

ISSN 0021-9002

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 corresponding processing and royalty fees (see <http://www.copyright.com>) are paid directly to CCC, 222 Rosewood Drive, Danvers, MA 01923, USA. 0021-9002/13