

Advances in Applied Probability

The Editorial Board would like to encourage the submission to the *Advances* of review papers summarising and coordinating recent results in any of the fields of applied probability.

In addition to these review papers, *Advances* is also designed to be a medium of publication for (1) longer research papers in applied probability, which may include expository material, (2) expository papers on branches of mathematics of interest to probabilists, (3) papers outlining areas in the biological, physical, social and technological sciences in which probability models can be usefully developed, (4) papers in applied probability presented at conferences which do not publish their proceedings, and finally, (5) letters to the editor on any appropriate topic in applied probability.

Advances now includes a section devoted to stochastic geometry and statistical applications (see the announcement and call for papers in the March 1993 issue).

In short, the main function of *Advances* is to define areas of recent progress and potential development in applied probability. As with the *Journal of Applied Probability*, *Advances* undertakes to publish papers accepted by the Editors within 15 months of their submission; letters to the editor will normally be published more rapidly.

Volume 26 No. 3 of *Advances* contains the following papers:

Stochastic Geometry and Statistical Applications

S. N. CHIU. Mean-value formulae for the neighbourhood of the typical cell of a random tessellation
DAVID MANNION. The volume of a tetrahedron whose vertices are chosen at random in the interior of a parent tetrahedron

VLADIMIR P. NOSKO. The horizon of the random cone field under a trend

MAURO PICCIONI AND SERGIO SCARLATTI. An iterative Monte Carlo scheme for generating Lie group-valued random variables

General Applied Probability

FRANK BALL AND PHILIP O'NEILL. Strong convergence of stochastic epidemics

STEVEN M. BUTLER. The final state of an epidemic in a large heterogeneous population with a large initial number of infectives

STEVEN M. BUTLER. The early and final states for an epidemic in a large heterogeneous population with a small initial number of infectives

HÅKAN ANDERSSON AND BOUALEM DJEHICHE. A functional limit theorem for the total cost of a multitype standard epidemic

J. C. D'SOUZA. The rates of growth of the Galton–Watson process in varying environments

PETER DONNELLY, PETER LLOYD AND AIDAN SUDBURY. Approach to stationarity of the Bernoulli–Laplace diffusion model

IOANNIS I. GERONTIDIS. Semi-Markov replacement chains

DIMITRIS N. POLITIS. Markov chains in many dimensions

PEKKA TUOMINEN AND RICHARD L. TWEEDIE. Subgeometric rates of convergence of f -ergodic Markov chains

ZHAO-GUO CHEN AND OLIVER D. ANDERSON. The representation and decomposition of integrated stationary time series

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Edited by M B Priestley

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Power of the Neural Network Linearity Test
Timo Teräsvirta, Chien-Fu Lin and Clive W J Granger

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New publication for 1994

Studies in Applied Probability

We are pleased to announce the publication of *Studies in Applied Probability*, a Festschrift in honour of Lajos Takács, one of the most versatile and original contributors to the theory of stochastic processes. Thirty-nine internationally known authors have contributed 26 papers reflecting Lajos Takács' wide-ranging influence on applied probability in its widest sense. The book is divided into six parts containing papers on epidemic processes, probabilistic methods, queueing theory, random walks, statistical studies and stochastic processes.

This book will be of interest to research workers specializing in statistical studies, operations research, computer engineering, telecommunications and epidemiology.

The contributors to this volume are:

Alejandro D. de Acosta, Mátyás Arató, U. Narayan Bhat, Simeon M. Berman, N.H. Bingham, W. Böhm, Yuan S. Chow, J.W. Cohen, Endre Csáki, D. J. Daley, Persi Diaconis, Jewgeni H. Dshalalow, Janos Galambos, J. Gani, Joseph Glaz, Peter W. Glynn, C.C. Heyde, J. Keilson, Min-Young Lee, Gérard Letac, Norihiko Miyawaki, S.G. Mohanty, Richard E. Nance, Joseph Naus, M.F. Neuts, N.U. Prabhu, András Prékopa, Ron Pyke, Malgorzata Roos, L.D. Servi, Mehrdad Shahshahani, Masaaki Sibuya, Donatas Surgailis, Ushio Sumita, Ryszard Syski, L.C. Tang, Sylvan Wallenstein, Ward Whitt and Wojbor A. Woyczynski.

This book also includes an appreciation of Lajos Takács and a complete list of his publications to date.

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Members of the London Mathematical Society should apply direct to the Secretary of the Society for copies of the *Journal*.

Please send all enquiries to: Applied Probability, School of Mathematics and Statistics, The University, Sheffield S3 7RH, UK.

We can provide back issue prices on application. Cheques, money orders, etc. should be made out to APPLIED PROBABILITY. Payment is accepted in US, UK or Australian currency.

NOTES FOR CONTRIBUTORS

Papers published in the *Journal* are of two kinds:

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

Review papers, longer research papers and letters to the editor are published in *Advances in Applied Probability*, a companion journal. (Note: Letters relating specifically to papers which have appeared in the *Journal of Applied Probability* will continue to appear in the *Journal*.)

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.

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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. Papers will not be reprinted without the written permission of the Trust. 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. Fifty reprints of each paper will be provided free; additional reprints are available 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. Please supply *three* double-spaced hard copies, at least one of which should be printed on one side of the paper only. The paper should include: (1) a short abstract of approximately 4–10 lines giving a non-mathematical description of the subject matter and results; (2) list of keywords detailing the contents for the purpose of computerised information retrieval; (3) primary and secondary classifications according to the 1991 Mathematics Subject Classification, to be found in the 1990 Annual Index of *Mathematical Reviews*.

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 free of charge from the Applied Probability Office.

For efficiency in processing, authors are requested to send all submissions to the Applied Probability Office in Sheffield, rather than to individual editors. The address for all submissions is:

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