

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in which probability models can be usefully developed, (4) papers in applied probability presented at conferences which do not publish their proceedings, and finally, (5) letters to the editor on any appropriate topic in applied probability.

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 23 No. 1 of *Advances* contains the following papers:

DONALD A. BERRY AND ROBERT P. KERTZ. Worth of perfect information in Bernoulli bandits
ROBERT A. BENHENNI. Monotone stopping-allocation problems
LUDGER RÜSCHENDORF. On conditional stochastic ordering of distributions
C. Y. TERESA LAM AND JOHN P. LEHOCZKY. Superposition of renewal processes
K. D. GLAZEBROOK. Strategy evaluation for stochastic scheduling problems with order constraints
THOMAS E. STERN AND ANWAR I. ELWALID. Analysis of separable Markov-modulated rate models for information-handling systems
ROBERT W. CHEN AND LARRY A. SHEPP. Synchronous service on a circle
RICHARD J. BOUCHERIE AND NICO M. VAN DIJK. Product forms for queueing networks with state-dependent multiple job transitions
PETER W. GLYNN AND WARD WHITT. A new view of the heavy-traffic limit theorem for infinite-server queues
CHENG-SHANG CHANG, XIU LI CHAO AND MICHAEL PINEDO. Monotonicity results for queues with doubly stochastic Poisson arrivals: Ross's conjecture

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Cheques made out on U.S., U.K. and Australian banks will be acceptable: they should be made payable to *Applied Probability*, and sent to:

Executive Editor, Applied Probability,
Department of Probability and Statistics,
The University, Sheffield S3 7RH, England.

THE MATHEMATICAL SCIENTIST (TMS)

This publication contains papers on a variety of mathematical topics for the general information and enjoyment of mathematicians, statisticians and computer scientists; it also appeals to workers in any other discipline lending itself to the application of mathematical methods. Readers are encouraged to submit short papers, letters and problems concerned with the theory and application of mathematics, statistics or computing. Material for publication should be presented in a clear and simple style, suitable for an informed but non-specialist mathematical audience, and may be sent to any member of the editorial board:

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Embedding procedures for discrete problems in probability, by G. Blom and L. Holst
On harmonic means and variances, by E. A. Catchpole and A. W. Plank
Simulations of enhanced oil recovery, by M. K. Cham and J. R. Blake
Lagrange interpolation polynomials based on equidistant nodes, by T. M. Mills and S. J. Smith
Problems of handling messy field data for engineering decision-making, by E. Moore, J. J. Sharp and L. M. Lye
Double Youden rectangles of size 6×11 , by D. A. Preece
Point processes and Tauberian theory, by S. Resnick
A generalized birthday problem, by D. Sandell
Renewal process proof for the limit of the Markov binomial distribution, by Y. H. Wang and W. J. Buhler
Stochastic modelling of dose-response for single cells in radiation experiments, by G. L. Yang and C. E. Swenberg

Orders and requests for further information should be sent to

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Statistics in Public Resources and Utilities, and in Care of the Environment

SPRUCE

7-10 April, 1992

Lisbon, Portugal

(A Joint Lisbon - Sheffield Conference)

The 1st international conference on Statistics in Public Resources and Utilities, and in Care of the Environment (SPRUCE) will take place in Lisbon, 7-10 April 1992. The conference is being organized by the statistics departments of the Universities of Lisbon and Sheffield in association with the International Statistical Institute. The aim is to bring together statisticians, probabilists and other scientists in the fields of protection and conservation of the environment, the safeguarding and garnering of resources, and the supply of energy in its various forms in a safe and reliable mode.

AREAS OF APPLICATION

The conference will include data analysis, probability modelling and statistical methodology in relation to water resources, coal and oil, nuclear plants, industrial effluent, the food chain, climatology, pollution and risk generally, ecological factors, epidemiological effects, air pollution, fisheries and oceanography, environmental monitoring.

ORGANIZATION

The Executive Committee from the Universities of Lisbon and Sheffield (with Chairman V. Barnett and Local Organizer F. Turkman) is being supported by a strong international Scientific Committee.

PROGRAMME

The scientific programme will consist of keynote lectures, invited talks, workshops and several contributed paper sessions. The following have already agreed to participate as keynote or invited speakers :

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W. Urfer, Germany

P. Switzer, U.S.A.
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P. Diggle, U.K.
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Further information:

SPRUCE Conference Secretary
DEIOC, Fac. de Ciencias, Bloco C2,
1700 Lisboa, PORTUGAL.

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

All enquiries about the *Journal*, 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

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.

Submission of papers

Papers submitted to the *Journal of Applied Probability* 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 of the *Journal* 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 the *Journal*. 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 Heyde at The Australian National University in Canberra.

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Volume 28 Number 1

Research Papers

- 1 J. GANI AND GY. MICHALETZKY. A carrier-borne epidemic with multiple stages of infection
9 JOHN COFFEY AND WOLFGANG J. BÜHLER. The Galton–Watson predator–prey process
17 O. V. SELEZNJEV. Limit theorems for maxima and crossings of a sequence of Gaussian processes and approximation of random processes
33 C. W. ANDERSON AND K. F. TURKMAN. The joint limiting distribution of sums and maxima of stationary sequences
45 PETER A. W. LEWIS AND ED MCKENZIE. Minification processes and their transformations
58 IOANNIS I. GERONTIDIS. Periodic strong ergodicity in non-homogeneous Markov systems
74 G. O. ROBERTS. A comparison theorem for conditioned Markov processes
84 MARCEL F. NEUTS AND CHARLES E. M. PEARCE. The superposition of independent discrete Markovian packet streams
96 DANIEL P. HEYMAN. Approximating the stationary distribution of an infinite stochastic matrix
104 S. KALPAZIDOU. On Beurling’s inequality in terms of thermal power
116 ABDULHAMID ALZAID, JEE SOO KIM AND FRANK PROSCHAN. Laplace ordering and its applications
131 J. GEORGE SHANTHIKUMAR AND DAVID D. YAO. Strong stochastic convexity: closure properties and applications
146 JOSEP M. FERRANDIZ AND AUREL A. LAZAR. Rate conservation for stationary processes
159 NICO M. VAN DIJK. On ‘stop = repeat’ servicing for non-exponential queueing networks with blocking
174 C. BLONDIA. Finite capacity vacation models with non-renewal input
198 GENJI YAMAZAKI, HIROTAKA SAKASEGAWA AND J. GEORGE SHANTHIKUMAR. A conservation law for single-server queues and its applications
210 KAZUYOSHI WAKUTA. Optimal control of an $M/G/1$ queue with imperfectly observed queue length when the input source is finite

Short Communications

- 221 M. A. GUERRY. Monotonicity property of t -step maintainable structures in three-grade manpower systems: a counterexample
225 DAVID G. KENDALL. The Mardia–Dryden shape distribution for triangles: a stochastic calculus approach
231 H. CARNAL AND J. HÜSLER. On the convex hull of n random points on a circle
238 GENJI YAMAZAKI AND MASAKIYO MIYAZAWA. The equality of the workload and total attained waiting time in average
245 EROL GELENBE, PETER GLYNN AND KARL SIGMAN. Queues with negative arrivals