

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in which probability models can be usefully developed, (4) papers in applied probability presented at conferences which do not publish their proceedings, and finally, (5) letters to the editor on any appropriate topic in applied probability.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 24 No. 1 of *Advances* contains the following papers:

G. A. WATTERSON. The mean number of alleles in multigene families

J. A. BUNGE AND H. N. NAGARAJA. Exact distribution theory for some point process record models

KOJI KURODA AND HIDEKI TANEMURA. Limit theorem and large deviation principle for the Voronoi tessellation generated by a Gibbs point process

IGOR RYCHLIK. The two-barrier problem for continuously differentiable processes

E. M. TORY AND D. K. PICKARD. Unilateral Gaussian fields

SAMUEL KARLIN AND AMIR DEMBO. Limit distributions of maximal segmental score among Markov-dependent partial sums

ATTILA CSENKI. The joint distribution of sojourn times in finite Markov processes

PHILIP J. BOLAND, EMAD EL-NEWEIHI AND FRANK PROSCHAN. Stochastic order for redundancy allocations in series and parallel systems

SØREN ASMUSSEN AND REUVEN Y. RUBINSTEIN. The efficiency and heavy traffic properties of the score function method in sensitivity analysis of queueing models

D. J. DALEY AND T. ROLSKI. Light traffic approximations in many-server queues

Subscription rates (per volume) for the *Advances* in 1992 are the same as for the *Journal* (see inside back cover). A discount of 10% is allowed to subscribers who order current issues of both the *Journal* and *Advances* at the same time direct from the Applied Probability Office. A detailed price list for both current and back issues is available on request.

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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Each volume consists of two issues distributed in June and December, totalling approximately 128 pages. Volume 17 (1992) costs £8.00 (US\$14.00, \$A18.00). It includes the following contributions:

Evaluating fuzzy representations of uncertainty, by Michael Laviolette and John W. Seaman, Jr.

Evidence and the posterior Bayes factor, by Murray Aitken

A brief history of infinite-dimensional skew fields, by P. M. Cohn

Comparing means of two Poisson distributions, by Hardeo Sahai and Satish C. Misra

Cover times for random walks on graphs, by Gunnar Blom and Dennis Sandell

The waiting time for the occurrence of k or more events in each of n independent Poisson processes, by William Woodside

Some (more or less) naturally occurring mixtures, by Norman L. Johnson and Samuel Kotz

A three-door game show and some of its variants, by V. V. Bapeswara Rao and M. Bhaskara Rao

A maximum likelihood proof of the Hadamard inequality, by ByoungSeon Choi

Orders and requests for further information should be sent to

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The University, Sheffield S3 7RH, England.

ANNOUNCEMENT AND CALL FOR PAPERS

SIXTH INTERNATIONAL SYMPOSIUM ON APPLIED STOCHASTIC MODELS AND DATA ANALYSIS

The Ins and Outs of Solving Real Problems Chania, Crete, Greece, 3–6 May 1993

Background

In 1981, 1983 and 1985 we organized an International Symposium on Data Analysis. In 1988 and 1991 the Symposia were enlarged including Applied Stochastic Models. The enthusiastic welcome and positive comments after the fifth meeting have prompted us to organize the SIXTH INTERNATIONAL SYMPOSIUM ON APPLIED STOCHASTIC MODELS AND DATA ANALYSIS in Chania, Crete, Greece on 3–6 May 1993.

The Symposium will include three kinds of contributions: Invited papers, classical communications and, as in the past, problems relative to any confrontation of real life problems on the two mentioned topics and a number of proposed solutions.

The Symposium '93

The symposium will be focused on the following fields:

1. Real life problems and theoretical results in data analysis and stochastic modelling.
2. Interactions between data analysis, applied stochastic models and artificial intelligence (including neural networks).
3. Probabilistic and statistical computation, and forecasting.
4. In particular, results and applications in economics, finance, management, marketing, health sciences, engineering, etc. are welcome.

Deadline for extended abstracts (2–3 pages) of classical communications and discussant candidates 15 May 1992.

For further information please contact:

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and Management
Technical University of Crete
73132, Chania, Crete, Greece
(Phone: 30-821-59627; Fax: 30-821-42176)

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Wiley Series in Probability and Mathematical Statistics - Applied Section
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The Art of Statistical Science A Tribute to G.S. Watson

Edited by K.V. MARDIA, University of Leeds, UK

The 70th birthday of G.S. Watson merits this affectionate tribute from his friends and colleagues. The contents of this unique volume reflects his broad research interests. His general philosophy - that research work should be motivated by real-life problems is evident throughout. Most of the papers included in this dedication focus upon the vital contributions that statistics is making, or might make, to a variety of fields.

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A. PANKRATZ, De Pauw University, Indiana, USA

The author presents the basic concepts and practice of building, using and interpreting single equation dynamic regression models (also called transfer function and intervention models). This is a companion volume to *Forecasting with Univariate Box-Jenkins Models: Concepts and Cases* published in 1983. The author places emphasis on applications through extensive case studies using real data.

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D.J. BARTHOLEMEW, London School of Economics, UK, A.F. FORBES, Institute of Manpower Studies, UK, and S.I. McCLEAN, University of Ulster, Northern Ireland

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Subscribers in North, Central and South America, and Australia:

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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;

(iii) primary and secondary classifications using 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 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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