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which probability models can be usefully developed, (4) papers in applied probability presented at conferences which do not publish their proceedings, and finally, (5) letters to the editor on any appropriate topic in applied probability.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

## Stochastic Geometry and Statistical Applications

JEFFREY D. HELTERBRAND, NOEL CRESSIE AND JENNIFER L. DAVIDSON. A statistical approach to identifying closed object boundaries in images

IRENE HUETER. The convex hull of a random sample

K.-H. KÜFER. On the approximation of a ball by random polytopes

K. V. MARDIA AND A. N. WALDER. Some size and shape distribution for paired landmark data V. WEISS AND W. NAGEL. Second-order stereology for planar fibre processes

## **General Applied Probability**

FRANK BALL, ROBIN K. MILNE AND GEOFFREY F. YEO. Continuous-time Markov chains in a random environment, with applications to ion channel modelling

D. J. HARTFIEL AND E. SENETA. On the theory of Markov set-chains

BHASKAR SENGUPTA AND RAYMOND W. YEUNG. Matrix product-form solutions for Markov chains with a tree structure

BERNARD VAN CUTSEM AND BERNARD YCART. Renewal-type behavior of absorption times in Markov chains

ECKHARD PLATEN AND ROLANDO REBOLLEDO. Pricing via anticipative stochastic calculus XINHONG DING. A limit theorem for certain disordered random systems

PETER W. GLYNN. Poisson's equation for the recurrent M/G/1 queue

HAROLD J. KUSHNER. Approximations of large trunk line systems under heavy traffic

EITAN ALTMAN AND HANOCH LEVY. Queueing in space

Subscription rates (per volume) for the *Advances* in 1994 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 US, UK and Australian banks will be acceptable: they should be made payable to *Applied Probability*, and sent to:

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## 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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