

# *Advances in Applied Probability*

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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models can be usefully developed, and finally, (4) papers in Applied Probability presented at conferences which do not publish their proceedings.

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.

The Editorial Board consists of E. Sparre Andersen, V. D. Barnett, D. Blackwell, V. R. Cane, J. W. Cohen, B. Gnedenko, E. J. Hannan, C. C. Heyde, J. Keilson, D. G. Kendall, J. F. C. Kingman, K. Krickeberg, R. M. Loynes, P. A. P. Moran, J. Neveu, K. R. Parthasarathy, N. U. Prabhu, R. Pyke, C. A. B. Smith and L. Takács. The Editor-in-chief is J. Gani, and the Editorial Office of the *Advances* is in the Department of Probability and Statistics, The University, Sheffield S3 7RH, England.

Volume 9 No. 4 of *Advances* contains the following papers:

A. K. SHAHANI AND D. M. CREASE	Towards models of screening for early detection of disease
H.-J. SCHUH AND A. D. BARBOUR	On the asymptotic behaviour of branching processes with infinite mean
ROBERT B. DAVIES BURTON SINGER AND SEYMOUR SPILERMAN	Testing the hypothesis that a point process is Poisson
CHARLES M. GOLDIE	Trace inequalities for mixtures of Markov chains
R. V. AMBARTZUMIAN ADRIAN BADDELEY	Convergence theorems for empirical Lorenz curves and their inverses
	Stochastic geometry from the standpoint of integral geometry
	A fourth note on recent research in geometrical probability

Subscription rates (per volume) for the *Advances* in 1977 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.

## **FIFTH INTERNATIONAL SYMPOSIUM ON MULTIVARIATE ANALYSIS**

This symposium will be held at the University of Pittsburg, Pennsylvania, U.S.A., during the period 19–24 June 1978. It is expected that several distinguished workers in the field will present invited papers on a broad spectrum of topics on the theory and applications of multivariate analysis. There will also be several sessions of contributed papers and persons interested in taking part should submit abstracts for consideration to P. R. Krishnaiah not later than 17 March 1978. In considering papers for presentation in the contributed paper sessions, the field of multivariate analysis will be interpreted in a very broad sense, as in the *Journal of Multivariate Analysis*. Further details regarding the symposium may be obtained by contacting

P. R. Krishnaiah,  
Department of Mathematics and Statistics,  
University of Pittsburgh,  
Pittsburgh, PA 15260,  
U.S.A.

# Publications of the Applied Probability Trust

## Methuen's Supplementary Review Series in Applied Probability

General Editor: M. S. Bartlett, M.A., D.Sc., F.R.S. Editor: J. Gani, D.I.C., Ph.D., D.Sc., F.A.A.

The following titles in this series are still available; the papers appeared in the earlier volumes of the *Journal of Applied Probability*.

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**Proceedings of the WHO Symposium on Quantitative Epidemiology** (Moscow, November 1970): reprinted from *Advances in Applied Probability*, Volume 3.

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This title was issued as a special supplement to *Adv. Appl. Prob.* Volume 7 No. 3. A limited number of copies are still available at the price of £2.30 (US\$4.00; \$A3.70).

Orders for the above should be sent to

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The University, Sheffield S3 7RH, England.

All orders should be accompanied by a remittance, payable to 'Applied Probability'.

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## Mathematical Spectrum: A magazine of contemporary mathematics

This magazine addresses itself primarily to young mathematicians in schools, colleges of education and universities. Its object is to discuss the entire range of modern mathematical disciplines in an informative but informal manner and to relate discoveries in mathematics to progress in the natural sciences, technology, social studies and business management.

The Editors believe that the process of learning is a dialogue and consequently they wish to promote active participation by readers. Correspondence on any subject relating to mathematics and mathematical education is welcomed. There is also a problem section, and readers are encouraged to submit their solutions, the best of which are published.

For further information and a detailed price list application should be made to

Editor — Mathematical Spectrum (Ref. AP)  
Hicks Building, The University,  
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### Subscription rates

Subscription rates (post free) for the 1977 volume of the *Journal* are as follows:

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

U.S.\$60.00, \$A.45.00, £30.00 for libraries and institutions;

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### All other subscribers:

£24.00 for libraries and institutions;

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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 enquires 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

*Submission of papers.* It is a condition of publication in the *Journal of Applied Probability* that papers shall not previously have appeared elsewhere, and will not be reprinted without the written permission of the Trust. The copyright of all published papers shall be vested in the Trust. It is the general policy of the *Journal* not to accept for publication papers which cannot appear in print within 15 months of their date of submission. 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.

Manuscripts should be written in English or French; manuscripts 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*. Authors are requested to comply with the following instructions in submitting their papers:

Authors in Britain, Europe, North and South America should send *three copies* of their submissions to the Applied Probability Office in Sheffield.

Authors in Australasia and the Far East should send *three copies* of their submissions to the Editor-in-Chief, Dr. J. Gani, in Canberra.

The Editor-in-Chief and the Applied Probability Office are in direct contact by Telex, and full details of the papers submitted either in Sheffield or Canberra are available in both centres.

Alternatively, authors may submit papers to any of the Editors listed on the inside front cover. In this case, *two copies* of the submission should be sent to the Editor concerned, and *one copy*, with a copy of the covering letter, should be sent to the Applied Probability Office in Sheffield.

*Journal conventions.* It will be of help to the Editors if the following conventions are adopted:

- a) The manuscript should be typewritten, using double spacing, on one side of the paper only.
- b) Each paper submitted 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.

c) References should be indicated in the text by the name of the author(s) and the date, thus: Feller (1961), and the full references listed at the end of the article in alphabetical order. Journal references should include the title of the article cited, the title of the journal (abbreviated in the style of the *International Journal of Abstracts: Statistical Theory and Method*), the volume, and inclusive page numbers. Book references should give the full title, the publisher, and the place of publication. For example:

Feller, W. (1961) A simple proof of renewal theorems. *Comm. Pure Appl. Math.* **14**, 285–293.  
Robinson, E. A. (1959) *An Introduction to Infinitely Many Variates*. Griffin, London.

d) Type faces should be carefully distinguished on the manuscript using the following standard methods of marking:

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e) Indices and subscripts should be clearly distinguished, using the marking  $\overset{4}{\smile}$   $\overset{4}{\frown}$  where necessary.

Authors will receive only first proofs for correction; charges will be made for excessive alteration to these.

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