

## CURRENT INDEX TO STATISTICS

Statisticians and others who make substantial use of statistical methods will be interested in the new *Current Index to Statistics: Applications, Methods and Theory*. This index will provide comprehensive coverage of statistics and of statistical aspects of a variety of related fields such as: biostatistics, survey methodology, econometrics, education, sociology, psychology, engineering, quality control, stochastic modeling and so on. Articles from journals, conference proceedings, monographs, research volumes and other publications will be included. Each article will be indexed in several ways: by each author, by non-trivial words in the titles (KWIC), and where available by key words. Over 2000 articles appearing in 1975 will be included in the 1975 edition.

The following 'core' journals will be indexed completely:

Adv. Appl. Prob.	Biometrische Z.	Sankhyā, Ser. A.
Amer. Statistician	Canad. J. Statist.	Sankhyā, Ser. B.
Ann. Inst. Statist. Math.	Comm. Statist.	Scand. J. Statist.
Ann. Prob.	Internat. Statist. Rev.	S. African Statist. J.
Ann. Statist.	J. Amer. Statist. Assoc.	Statist. Comput. Simulation
Appl. Statist. (= JRSS, C)	J. Appl. Prob.	Technometrics
Austral. J. Statist.	J. Multivariate Anal.	The Statistician
Berkeley Symp. Statist. Prob.	J. R. Statist. Soc., Ser. A.	Theor. Prob. Appl.
Biometrics	J. R. Statist. Soc., Ser. B.	(English translation)
Biometrika	Metrika	Trabajos Estadist.
		Z. Wahrscheinlichkeitsth.

Also included will be appropriate articles from a large number of 'related' journals such as:

IEEE Trans. (several)	Naval Res. Logist Quart.	Rev. Econ. Statist.
J. Multivariate Behavioral Res.	Rev. Statist. Appl.	Demography
SIAM Journals	ASA Proc. Business and Economics	Operat. Res. Quart.
J. Educ. Statist.	Metron	Management Sci. (Theory)
Calcutta Statist. Assoc. Bull.	Inf. Control	Proc. Camb. Phil. Soc.
Econometrika	Stoch. Proc. Appl.	Statistica Neerlandica
Psychometrika	Proc. Natn. Acad. Sci.	Mathematics Teacher
British J. Math. Statist. Psychol.	J. Combinatorial Theory	Ann. Human Genetics
Operat. Res.	Selected Translations in Math.	BIT
J. Indian Statist. Assoc.	Statist. Prob.	Bell System Tech. J.
J. Assoc. Comput. Mach.		Trans. Math. Software

and many more.

Prices for the *Current Index to Statistics*, 1975, are: individuals \$12, and institutions \$18. Copies may be ordered from The American Statistical Association, 806 15th Street, N.W., Washington, D.C., 20005, U.S.A. Additional information may also be obtained from Brian L. Joiner, Editor, *Current Index to Statistics*, 1210 W. Dayton St., Madison, WI, 53706, U.S.A.

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## SECOND ANNOUNCEMENT

### SIXTH CONFERENCE ON STOCHASTIC PROCESSES AND THEIR APPLICATIONS: ISRAEL, 7–11 JUNE 1976

The Israel Conference is the sixth in a series of conferences sponsored by the Committee for Conferences on Stochastic Processes, which now functions as a committee of the newly established Bernoulli Society for Mathematical Statistics and Probability. Previous conferences were held in Rochester (1971), Louvain (1972), Sheffield (1973), York (1974) and Maryland (1975).

This year's Conference is organized by the Technion, Israel Institute of Technology and co-sponsored by ORSIS — The Operations Research Society of Israel, The Israel National Academy for Sciences and Humanities and The Israel Mathematical Union.

The Conference will be similar in format to previous conferences in the series. Its objective is to promote the knowledge and use of Probability and Stochastic Processes by bringing together experts in the theory of these subjects and those who use them in applications.

There will be sessions featuring invited lectures, contributed papers and panel discussions. The tentative list of lecturers includes: E. Çinlar, J. Horowitz, M. F. Neuts, P. Ney, R. Syski and W. Whitt from the U.S.A.; H. E. Daniels, M. B. Priestley and S. J. Taylor from the U.K.; A. A. Balkema, W. Bühler, P. Jagers and J. H. A. de Smit from Europe; C. C. Heyde and R. Tweedie from Australia; K. B. Athreya from India; and S. Karlin and M. Zakaï from Israel. Replies from other invited speakers are awaited at the moment. Professor A. Dvoretzky — President of the Israeli National Academy of Sciences and Humanities — will deliver the opening lecture of the Conference on the topic 'Generalizations of Martingales'.

To obtain registration material and further information on the Conference, entertainment program, air travel and accommodation, please write to the Conference secretary at the address below.

Those wishing to submit a paper are requested to send the title and abstract to the same address. This should be on a single sheet of paper giving the author's name and affiliation.

Conference Address: Mrs. Batya Maayan,  
Faculty of Industrial and Management Engineering,  
Technion — Israel Institute of Technology,  
Technion City, Haifa, Israel.

B. EPSTEIN                      M. RUBINOVITCH  
Technion — Faculty of Industrial and  
Management Engineering

# 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, J. Hájek, 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 8 No. 1 of *Advances* contains the following papers:

Symposium on Mathematical Genetics, Edinburgh, 7–8 April 1975

Byron J. T. Morgan	Stochastic models of grouping changes
Harry Kesten	Recurrence criteria for multi-dimensional Markov chains and multi-dimensional linear birth and death processes
John M. Holte	A generalization of Goldstein's comparison lemma and the exponential limit law in critical Crump–Mode–Jagers branching processes
Jean-Guy Dion	Sur une caractérisation des vidanges fortes
Philip C. Prorok	The theory of periodic screening I: Lead time and proportion detected
John Bather	Optimal stationary policies for denumerable Markov chains in continuous time
D. R. Robinson	Markov decision chains with unbounded costs and applications to the control of queues
Rajat K. Deb	Optimal control of batch service queues with switching costs
Stig I. Rosenlund	Busy periods in time-dependent $M/G/1$ queues

Subscription rates (per volume) for *Advances* in 1976 will be the same as for the *Journal*, namely:

For libraries and institutions:	U.S.\$43.20	£stg.18.00
For individuals belonging to a recognised scientific society:	U.S.\$14.40	£stg. 6.00

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Prices of back issues on application to the Executive Editor.

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, *Advances in Applied Probability*,  
Department of Probability and Statistics,  
The University, Sheffield S3 7RH, England.

# 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 (pure mathematics, applied mathematics, statistics, operational research, computing science, biomathematics) 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.

Volume 8 (1975/76) includes the following articles:

C. P. Ormell	A new look at Archimedes
A. G. Munford	An urn problem with a quality-control application
Jonathan Hitchcock	A complex-number slide rule
K. R. S. Sastry	Heronian triangles
O. D. Anderson	Can you contribute to time series research?
F. Chorlton	Factorisation of quadratic forms
Frederick Stern	Time to win, time to lose
A. D. Misra	Magic squares
R. J. Stammers and R. N. Maddison	Solving polyomino covering problems by computer

For further information application should be made to

Editor — Mathematical Spectrum, Hicks Building,

The University, Sheffield S3 7RH, England.

*Mathematical Spectrum* is published by the Applied Probability Trust.

# Methuen's Supplementary Review Series in Applied Probability

*General Editor:* M. S. BARTLETT, M. A., D.SC., F. R. S.

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The remaining stock in this Series has been purchased by the Applied Probability Trust. The volumes still available are:

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by E. J. Hannan

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While stocks last, these reviews may be purchased at the price of £0.50 (U.S. \$1.25; \$A. 1.00) each, post free. Please send your order to:

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

Also available: Proceedings of the WHO SYMPOSIUM ON QUANTITATIVE EPIDEMIOLOGY (Moscow, November 1970); reprinted from the *Advances in Applied Probability*, Vol. 3. The price per copy is £0.50 (U.S. \$1.25; \$A. 1.00).

It is essential that all orders are accompanied by a remittance, payable to *Applied Probability*.

### Subscription rates

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U.S. \$43.20, £stg. 18.00, for libraries and institutions;

U.S. \$14.40, £stg. 6.00, for individuals belonging to a recognised scientific society.

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 and orders for back numbers 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 one 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:

Italic capitals (*T*, *I*, *R*) and lower case letters (*t*, *i*, *r*) should be underlined once, e.g. T, I, R, t, i, r. Bold-face capitals (**T**, **I**, **R**) and lower case letters (**t**, **i**, **r**) should have a curly

underline, e.g., T, I, R, t, i, r. Greek characters ( $\alpha$ ,  $\beta$ ,  $\theta$ ) and script letters ( $\mathcal{J}$ ,  $\mathcal{I}$ ,  $\mathcal{R}$ ) should

be carefully drawn and identified when first used by a marginal note of the form ' $\alpha$ —lower case Greek alpha' or ' $\mathcal{R}$ —script R'.

e) Indices and subscripts should be clearly distinguished, using the marking  $\overset{4}{\underbrace{\quad}}$ ,  $\underset{4}{\widehat{\quad}}$  where necessary.

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

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