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Cornell University established a Mathematical Sciences Institute in January 1986, under a contract with the U.S. Army Research Office. The objective of the Institute is to perform basic research in broad areas of applied mathematics, with potential applications to science and engineering. Professor Geoffrey S. S. Ludford is the Director of the Institute.

Statistics and applied probability is one of the four designated areas of research in the Institute, the other three being applied analysis, physical mathematics and numerical analysis. Professor N. U. Prabhu is the Program Coordinator for statistics and applied probability. The research program in this area emphasizes computational statistics, data analysis, reliability, quality control and stochastic processes.

The Institute's program will provide for the following:

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Consulting. The Institute will provide technical assistance to the Army. Most of this assistance will be coordinated by the Statistical Consulting Service of the Cornell Statistics Center, and through a Supercomputing Liaison Unit that will work with the Cornell Theory Center. Visiting scientists and postdoctoral fellows may occasionally be called upon for help in answering specific technical questions.

During the first year the following members of the Cornell faculty in the area of statistics and probability will be affiliated with the Institute: Professors Robert E. Bechhofer, David C. Heath, Thomas J. Santner, Howard M. Taylor and Paul F. Velleman. Professor Walter L. Federer will be the Director of the Statistical Consulting Service.

For further information please write to Professor N. U. Prabhu, Program Coordinator for Statistics and Applied Probability, Mathematical Sciences Institute, Caldwell Hall, Cornell University, Ithaca, NY 14853; phone (607)256–4856.

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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.

The Editor-in-Chief is J. Gani; the Coordinating Editors are C. C. Heyde, M. F. Neuts and G. E. H. Reuter; other editors are P. J. Brockwell, V. R. Cane, J. W. Cohen, E. J. Hannan, J. Keilson, D. G. Kendall, J. F. C. Kingman, K. Krickeberg, R. M. Loynes, K. R. Parthasarathy, C. A. B. Smith, and R. L. Tweedie. The Editorial Office of the *Advances* is in the Department of Probability and Statistics, The University, Sheffield S3 7RH, England.

Volume 18 No. 2 of *Advances* contains the following papers:

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Subscription rates (per volume) for the *Advances* in 1986 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.

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NOW AVAILABLE

ESSAYS IN TIME SERIES AND ALLIED PROCESSES

In January 1986 the Applied Probability Trust published a supplementary volume 23A of the *Journal of Applied Probability* (JAP) to mark the sixty-fifth birthday of Professor E. J. Hannan FAA, FASSA, an editor of the Journal since its inception in 1964. Entitled *Essays in Time Series and Allied Processes*, this book consists of papers relating to various aspects of time series, Professor Hannan's main area of research. The seven sections are devoted to: structure and general methods, estimation, hypothesis testing and distribution theory, non-linear and non-stationary systems, random fields and point processes, allied stochastic processes, and algorithms and computations.

This special volume, which is edited by J. Gani and M. B. Priestley, contains contributions from the following colleagues and students of Professor Hannan:

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C. F. Ansley	S. M. Heravi	T. Ozaki	V. Solo
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A complete bibliography of Professor Hannan's publications from 1955 to 1984 is included.

Essays in Time Series and Allied Processes is in the usual JAP format (250 × 170 mm) with 437 pages, but with hard binding and an attractive dust jacket. The price is £30.00 (US$35.00; $A.43.00).

Orders, preferably accompanied by a remittance, should be sent to the Executive Editor, Applied Probability, Department of Probability and Statistics, The University, Sheffield S3 7RH, England. Payments must be in favour of 'Applied Probability': sterling cheques should be drawn on a British bank, US or Australian dollar cheques on a US or Australian bank respectively.

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ESSAYS IN STATISTICAL SCIENCE

In 1982 the Applied Probability Trust issued a supplementary volume No. 19A of the *Journal of Applied Probability* (JAP). Entitled *Essays in Statistical Science*, this book consists of a collection of papers on a range of topics including statistical theory; stochastic processes, time series, geometric probability and mathematical genetics. It was published as a Festschrift in honour of the sixty-fifth birthday of Professor P. A. P. Moran FAA, FRS, of the Department of Statistics, Australian National University, Canberra, an editor of JAP from 1964 to 1982.

This special volume is edited by J. Gani and E. J. Hannan and contains contributions from the following colleagues and students of Professor Moran: M. S. Bartlett, B. Benjamin, V. Cane, H. Cohn, D. J. Daley, H. E. Daniels, A. W. Davis, P. Erdös, W. J. Ewens, P. D. Finch, J. Gani, J. M. Hammersley, E. J. Hannan, A. M. Hasofer, C. R. Heathcote, C. C. Heyde, D. G. Kendall, J. F. C. Kingman, R. McNamee, D. R. McNeil, R. J. Maillardet, R. E. Miles, B. H. Neumann, M. Osborne, D. K. Pickard, D. Pollard, B. C. Rennie, E. L. Scott, E. Seneta, C. A. B. Smith, D. Vere-Jones, I. Vincze, G. S. Watson, G. A. Watterson, M. Westcott, P. Whittle, E. J. Williams and S. R. Wilson.

Essays in Statistical Science is in the usual JAP format (250 × 170 mm); with 434 pages, and has an attractive dust jacket and hard binding. The price is £18.00 (US$26.00; $A28.00). Orders should be sent to the Executive Editor, Applied Probability, Department of Probability and Statistics, The University, Sheffield S3 7RH, England.

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Papers in honour of M. S. Bartlett on the occasion of his sixty-fifth birthday

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Pp. viii + 423

This book was published by the Applied Probability Trust in 1975 as a tribute to Professor Bartlett from colleagues throughout the world. Due to difficulties in storing the remaining stock, we are now making copies available to our readers and subscribers at only £3.50 (US$5.00; $A.6.00) to cover administrative costs, postage and packing. Please order your copy now from

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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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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 Gani at the University of California at Santa Barbara.

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