IMS Lecture Notes–Monograph Series   Volume 2

Series Editor, Shanti S. Gupta

Survival Analysis edited by John Crowley and Richard A. Johnson

This volume contains invited papers from the Special Topics Meeting on Survival Analysis sponsored by the Institute of Mathematical Statistics, October 26–28, 1981 at the Ohio State University, Columbus, Ohio.

TABLE OF CONTENTS

IMS LECTURE NOTES — MONOGRAPH SERIES

This series provides an avenue for the rapid, but carefully refereed, publication of important research results in comprehensive form and expository style. These volumes should be of great value to researchers and advanced students in statistics, probability, and related fields. The series editor is Shanti S. Gupta, Purdue University.

4 ZONAL POLYNOMIALS
by Akimichi Takemura
A self-contained development of zonal polynomials in the framework of standard multivariate analysis.

Zonal polynomials have been used extensively in the study of noncentral multivariate distributions. This easily understood treatment uses only the standard tools of linear algebra and multivariate normal distribution theory.

110 pages
List price $15
IMS members $9

5 INEQUALITIES IN STATISTICS AND PROBABILITY
edited by Y. L. Tong
Proceedings of the Symposium on Inequalities in Statistics and Probability held in Lincoln, Nebraska during October 1982.

This volume reports on the recent rapid growth in the field of inequalities due, in part, to widespread applications in reliability theory, in multivariate nonnormal analysis, and in optimization and constraint problems. The volume contains thirty expository and research papers by leaders in the field.

263 pages
List price $25
IMS members $15

6 THE LIKELIHOOD PRINCIPLE
by James Berger and Robert Wolpert
A comprehensive presentation and criticism of the likelihood principle and its generalizations.

This book provides a non-technical development of the likelihood principle with attention to some of its surprising implications for such areas as randomization analysis, censoring, significance testing, and sequential analysis. The authors also discuss generalizations and implementations of the likelihood principle.

217 pages
List price $25
IMS members $15

& ADDITIONAL TITLES
Previously published: Volume 1, *Essays on the Prediction Process* by Frank Knight ($15/members $9); Volume 2, *Survival Analysis* edited by John Crowley and Richard A. Johnson ($25/members $15); Volume 3, *Empirical Processes* by Peter Gaenssler ($20/members $12). Forthcoming: *Fundamentals of Statistical Exponential Families* by L. Brown, *Approximate Computations of Expectations* by C. Stein, *Adaptive Statistical Procedures and Related Topics* edited by T. L. Lai and J. Van Ryzin, *Differential Geometry in Statistical Inference* by S. Amari, O. Barndorff-Nielsen, R. Kass, S. Lauritzen, and C. R. Rao, and *Group Theory in Statistics* by P. Diaconis.

Prepaid orders for individual volumes and requests for standing order enrollment (eligible for 20% prepublication discounts from list prices) should be sent to

Institute of Mathematical Statistics
3401 Investment Blvd. #7
Hayward, CA 94545 (USA)

NSF Seeks Proposals

for the 1988

REGIONAL CONFERENCE SERIES
IN MATHEMATICAL SCIENCES

PROGRAM: The National Science Foundation is seeking proposals from host institutions in the U.S. for five-day regional conferences. Each conference is to feature a distinguished lecturer who will deliver 10 lectures on a subject of current research interest in the mathematical sciences. It is expected that the lecturer will give two lectures per day during the five days, with the remaining time available for study, informal discussion and exchange of ideas.

CRITERIA: All applying institutions having at least some research competence in the area of its proposal are eligible and encouraged to apply. The conference should be planned for a summer week in 1988 (not earlier than May 1) or held during a recess in the succeeding academic year.

CONFERENCE ORGANIZATION: The host institution is responsible for arranging conference details, hotels, and social events during the five-day conference. Participants in the conference will receive allowances for travel and subsistence under the host institution's grant from NSF.

AWARD: The principal lecturer receives from the Conference Board a fee for delivering his/her lecture and a second fee for organizing these lectures into a substantial expository monograph which will be submitted to the NSF for approval and published by one of three organizations: the American Mathematical Society, the Society for Industrial and Applied Mathematics, or in conjunction, the American Statistical Association and the Institute of Mathematical Statistics.

APPLICATION PROCEDURES: Proposals (twenty) by prospective institutions should be sent directly to the Data Support Service Section, National Science Foundation, 1800 G Street, N.W., Washington, D.C. 20550. Proposals must follow the guidelines issued by CBMS.

INQUIRIES: Please address all inquiries and requests for information sheet/guidelines to:

Conference Board of the Mathematical Sciences
1529 18th Street, N.W.
Washington, D.C. 20036
202-293-1170

DEADLINE
1988 Conferences: April 1, 1987

THE INSTITUTE OF MATHEMATICAL STATISTICS

(Organized September 12, 1935)

The purpose of the Institute of Mathematical Statistics is to encourage the development, dissemination, and application of mathematical statistics.

OFFICERS AND EDITORS

Journals. The scientific journals of the Institute are *The Annals of Statistics*, *The Annals of Probability*, and *Statistical Science*. The news organ of the Institute is *The Institute of Mathematical Statistics Bulletin*.

Individual, Institutional, and Corporate Memberships. All *individual members* receive *Statistical Science* and *The IMS Bulletin* for a basic annual dues rate of $30. Individual members may elect to receive one *Annals* for an additional $10 or both *Annals* for an additional $20. Dues allocations to each journal are set by Council resolution. Of the total dues paid, $8 is allocated to *The IMS Bulletin* and the remaining amount is allocated equally among the scientific journals received. Memberships are available at a reduced rate (40% of regular rates) for full-time students, permanent residents of developing countries, and retired members. Retired members may also elect to receive the *Bulletin* only for $10. *Institutional memberships* are available to nonprofit organizations at $225 per year and *corporate memberships* are available to other organizations at $500 per year. Institutional and corporate memberships include two multiple-readership copies of all IMS journals in addition to other benefits specified for each category (details available from the IMS Business Office).
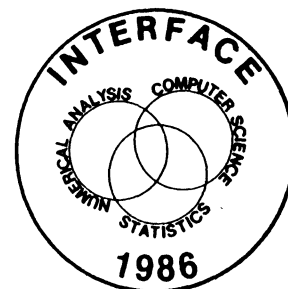
Individual and General Subscriptions. Subscriptions are available on a calendar-year basis. For 1986, all subscriptions to one or both *Annals* automatically include one subscription to *Statistical Science*. *Individual subscriptions* are for the personal use of the subscriber and must be in the name of, paid directly by, and mailed to an individual. Individual subscriptions for 1986 are available to both *Annals* and *Statistical Science* ($79), one *Annals* and *Statistical Science* ($52), *Statistical Science* only ($25), and *The IMS Bulletin* ($15). *General subscriptions* are for libraries, institutions, and any multiple-readership use. General subscriptions for 1986 are available to both *Annals* and *Statistical Science* ($155), *The Annals of Statistics* and *Statistical Science* ($85), *The Annals of Probability* and *Statistical Science* ($80), *Statistical Science* only ($40), and *The IMS Bulletin* ($20). Air mail rates for overseas delivery of general subscriptions are $40 per title.

Correspondence. Mail to IMS should be sent to the IMS Business Office (membership, subscriptions, claims, copyright permissions, advertising, back issues), the Editor of the appropriate journal (submissions, editorial content), or the Managing Editor (production).

Computer Science and Statistics:

Proceedings of the 18th Symposium on the Interface

March 19-21, 1986

Thomas J. Boardman
editor

A Publication of the American Statistical Association

The American Statistical Association (ASA) and Colorado State University proudly announce the publication of *Computer Science and Statistics: Proceedings of the 18th Symposium on the Interface*. This 480-page, paperbound volume contains papers and discussions presented in Fort Collins, Colorado, by numerical analysts, statisticians, computer scientists, and combinations of these professionals. These papers and discussions are reproduced exactly as received from the author. The conference was cosponsored by Colorado State University, the American Statistical Association (ASA), and the International Association for Statistical Computing.

Complete the order form and send it with a check for $35 per copy to: American Statistical Association, 806 15th St., N.W., #640, Washington, DC 20005.

Order Form

Computer Science and Statistics:
Proceedings of the 18th Symposium on the Interface

Please send_____copy(ies) of the Interface Proceedings at $35.00 per copy. Enclosed is a check in the amount of $_____. Make check payable to the American Statistical Association and mail with order form to ASA, 806 15th St., N.W., #640, Washington, DC 20005.

Name _____

Organization_____

Address_____

| | State/ | Mail/ |
City _____ Province _____ Zip Code_____