STATISTICAL THEORY AND METHOD ABSTRACTS

A Journal of the International Statistical Institute

The object of this abstracting service is to cover published papers concerned with statistical theory, including relevant aspects of probability and mathematical methods, and new contributions to statistical method. These abstracts provide valuable information on new developments for studying problems in many fields: such as frequency distributions, estimating and testing problems, sampling and experimental designs, variance analysis, spectral theory and other methods in time-series analysis, queueing theory, reliability and acceptance inspection. Journals appearing in all parts of the world, on mathematics and statistics, or on other fields and possible contribution of interest are regularly scanned for suitable papers. Abstracts are also prepared from collections of papers such as reports of conferences, symposia and seminars; technical reports of experiment and research stations are covered.

inspection. Journals appearing in all parts of the world, on mathematics and statistics, or on other fields and possible contribution of interest are regularly scanned for suitable papers. Abstracts are also prepared from collections of papers such as reports of conferences, symposia and seminars; technical reports of experiment and research stations are covered.

The abstracts do not exceed 400 words, with occasional "double abstracts" for papers where this size is not sufficient to represent the paper. The language is English; the language of the original paper is indicated. The headings give the name and address of the author together with the Journal in which the paper is published; moreover, a note is added on the

number of references, tables and figures.

The classification scheme which is used in this Journal supplies a division of all abstracts in twelve main sections. The pages of the Journal are colour-tinted in accordance with these main sections. Each section is further sub-divided to indicate the main topic of the paper; a secondary number denotes the most important additional topic referred to by the author. A special index in each part links together these two classifications. This scheme is arranged to facilitate transfer to punch cards. Papers containing new statistical tables are listed in a separate index.

The abstracts are numbered serially, the volume number being inserted as a prefix. The Journal is published four times a year and contains approximately 1,000 abstracts. An author index, the secondary classification index and the new statistical tables index are published in each issue and combined in a yearly supplement which also contains a list of all Journals repre-

sented in the volume by one or more abstracts.

Annual Subscription

Single Number

Single Number Loose Leaf Binders for Single Abstract Sheets £7. 10s. (U.S.A. \$24.00) £2. 5s. (U.S.A. \$ 7.00) 16s. 3d. including postage and packing.

OLIVER AND BOYD LTD.

Tweeddale Court, 14 High Street, Edinburgh, 1

REVIEW OF THE INTERNATIONAL STATISTICAL INSTITUTE

Contents of Vol. 38, No. 3, 1970

Articles

Hansen, M., Waksberg, J.—Research on non-sampling errors in censuses and surveys. Lukacs, E.—Characterization theorems for certain stochastic processes.

Noda, K., Taga, Y.—Bayes and minimax estimation methods for the optimum de-

composition of a sample space based on prior information.

Csörgö, M., Seshadri, V.—On the problem of replacing composite hypotheses by equivalent simple ones.

Voight, R. B.—The New Haven census use study.

Communications

Statistical organization and administration Statistical training and research Statistical societies

Calendar of meetings

Book reviews

The REVIEW OF THE ISI is published three times per year. The annual subscription is \$11.50 post free.

Orders should be sent to: International Statistical Institute, 2, Oostduinlaan, The Hague, Netherlands.

METRON

Vol. XXVII, n. 1-2

1969

SOMMARIO-SOMMAIRE-CONTENTS-INHALT-SUMARIO

Vittorio Castellano. Interazione di gruppo e ruolo della componente individualistica nella formazione dei comportamenti di gruppo

CARLO BENEDETTI. On some Convergence Problems in a Statistical Approach about the Distribution of Prime Numbers

O.M.J. MITTMANN. Zur statistischen Zwillingsmethode

L.D. Broemeling and H.O. Hartley. Confidence Region Estimation of Response Surface Ordinates

Amato Herzel. Alcuni problemi di massimi e minimi condizionati di interesse statistico Amato Herzel. Sulla concentrazione e su alcuni indici che la misurano A.M. Mathai. Some Limit Theorems in Terms of "Dispersion"

Bruno Rizzi. Funzioni quasi-periodiche e funzioni pseudo-aleatorie Ludovico Piccinato. Sull'analisi della varianza per esperimenti fattoriali non bilanciati

Henrick J. Malik. Estimation of the Parameters of the Power Function Population B. Raja Rao. H. Robbins' Problem and a Property of Distributions Admitting Sufficient Statistics

M.V. Muddapur. On the Power of the Test for Multiple Correlation Coefficient Giovanni Girone. Su un indice di mutabilità delle serie cicliche

LIBRI RECENSITI—OUVRAGES RECENSES—BOOK REVIEWS—BUCHBESPRECHUNGEN— LIBROS RECENSIDOS

THE INSTITUTE OF MATHEMATICAL STATISTICS

(Organized September 12, 1935)

OFFICERS

President:

Jack C. Kiefer, Department of Mathematics, Cornell University, Ithaca, New York 14850

President-Elect:

William Kruskal, Department of Statistics, University of Chicago, Chicago, Illinois

Executive Secretary:

Leo Katz, Statistical Laboratory, Michigan State University, East Lansing, Michigan 48823

Program Secretary:

R. V. Hogg, Department of Statistics, University of Iowa, Iowa City, Iowa 52240

Treasurer:

George J. Resnikoff, Department of Statistics, California State College, Hayward, California 94542

Editor:

Z. W. Birnbaum, Department of Mathematics, University of Washington, Seattle, Washington $98105\,$

Managing Editor:

K. J. C. Smith, Department of Statistics, University of North Carolina, Chapel Hill, North Carolina 27514

The purpose of the Institute of Mathematical Statistics is to encourage the development,

dissemination, and application of mathematical statistics.

Membership dues including a subscription to the ANNALS of MATHEMATICAL STATISTICS are \$20.00 per year for residents of the United States or Canada and \$12.00 per year for residents of other countries. Special student rates of \$10.00 per year are available to students residing in the U.S. and Canada. Inquiries regarding membership in the Institute should be sent to the Treasurer of the Institute.

Membership in the Institute of Mathematical Statistics is not required of authors of papers in the Annals of Mathematical Statistics and the fact of membership or non-membership is given no weight in the consideration of submitted manuscripts.

(Instructions for authors—continued)

Authors are asked to keep in mind the typographical difficulties and high cost of printing complicated mathematical formulas. The difference between capital and lower-case letters should be clearly shown; care should be taken to avoid confusion between such pairs as zero and the letter O, the numeral 1 and the letter I, numeral 1 used as superscript and prime ('), alpha and a, kappa and k, mu and u, nu and v, eta and n, etc. Bars above groups of letters (e.g., $\overline{\log x}$) and underlined letters (e.g., \underline{x}) are difficult to print and should be avoided; lim inf and lim sup are preferable to lim and lim. Symbols are automatically italicized by the printer and should not be underlined on manuscripts. Boldface letters may be indicated by underlining with a wavy line on the manuscript; bollface subscripts and superscripts are not available. Unusual accents on letters should be avoided or replaced by superscripts or subscripts. Complicated exponentials should be represented with the symbol exp. In writing square roots the fractional exponent is preferable to the radical sign. Fractions are preferably written with the solidus or negative exponent; thus (a+b)/(c+d) rather than $\frac{a+b}{c+d}$, and $(2\pi)^{-1}$ rather than $\frac{1}{2\pi}$. In addition to decreasing the printing costs, a simple notation greatly improves the readability and appearance of a manuscript.

Authors will ordinarily receive only galley proofs. Fifty reprints without covers will be furnished free. Additional reprints and covers may be ordered at cost on forms which will

be provided by the printer.

Contents (Continued)

Equivalence of Gauss's principle and minimum discrimination information estimation of probabilities	1011
Sequential confidence intervals based on rank testsJ. C. Geertsema	1016
A note on the existence of the weak capacity for channels with arbitrarily varying channel probability functions and its relation to Shannon's zero error capacity. R. Ahlswede	
On the inference and decision models of statistics	$1034 \\ 1054$
Notes	
On some problems involving random number of random variables P. Todorovic	1059
A comparison between the Martin boundary theory and the theory of likelihood ratios	1064
Convergence of sums to a convolution of stable laws J. David Mason	1068
Note on a characterization of the inverse Gaussian distribution J. K. Wani and D. G. Kabe	1071
On bounds on the central moments of even order of a sum of independent random variables	1074
The geometric density with unknown location parameter Jerome Klotz	1078
Continuity of the Bayes risk	1083
A sufficient statistics characterization of the normal distribution Douglas Kelker and Ted K. Matthes	1086
Distributions connected with a multivariate Beta statistic D. J. DE WAAL	1091
On the domains of definition of analytic characteristic functions R. Cuppens and E. Lukacs	1096
A martingale decomposition theorem	1102
The nonexistence of linked block designs with Latin square association schemes $$\operatorname{\textbf{Peter}}\xspace$ W. M. John	
Some observations on the White-Hultquist procedure for the construction of confounding plans for mixed factorial designs	1108
Products of two polykays when one has weight 5 P. N. NAGAMBAL AND D. S. TRACY	1114
On Stanton and Mullin's construction of Room squares	1122
Correction Notes	
Correction to "A delicate law of the iterated logarithm for non-decreasing stable processes"	1126
Correction to "Uniform consistency of some estimates of a density function" D. S. Moore and E. G. Henrichon	1126
D. S. Moore and E. G. Henrichon i Book Reviews. S. Zacks, Václav Dupač i	1128
Abstracts	1133
News and Notices	1159
Publications Received	1172

CHANGE OF EDITOR. New manuscripts arriving after July 1, 1970, should be submitted to the incoming Editor, Ingram Olkin, Department of Statistics, Stanford University, Stanford, California 94305. Correspondence about old manuscripts should be directed to Z. W. Birnbaum.