JOURNAL OF THE AMERICAN STATISTICAL ASSOCIATION

JUNE 1949

Articles

The Current Status of State and Local Population Estimates in the Census The Uses and Usefulness of Binomial Probability Paper. FREDERICK MOSTELLER AND JOHN W. TUKEY Teaching Statistical Quality Control for Town and Gown EDWIN G. OLDS AND LLOYD A. KNOWLER Unemployment and Migration in the Depression (1930-1935) RONALD FREEDMAN AND AMOS H. HAWLEY Minimum X² and Maximum Likelihood Solution in Terms of a Linear Transform, with Particular Reference to Bio-Assay......Joseph Berkson Some Inadequacies of the Federal Censuses of Agriculture. RAYMOND J. JESSEN The Edge Marking of Statistical Cards......A. M. Lester Proceedings of the 108th Annual Meeting..... Book Reviews

AMERICAN STATISTICAL ASSOCIATION 1603 K Street, N. W., Washington 6, D. C.

MATHEMATICAL REVIEWS

A journal containing reviews of the mathematical literature of the world, with full subject and author indices

Publication of this journal is sponsored by the American Mathematical Society, Mathematical Association of America, Institute of Mathematical Statistics, London Mathematical Society, Edinburgh Mathematical Society, Union Matematica Argentina, and others.

Subscriptions accepted to cover the calendar year only. Issues appear monthly except July. \$20.00 per year.

Send subscription order or request for sample copy to

AMERICAN MATHEMATICAL SOCIETY 531 West 116th Street, New York City 27

SKANDINAVISK AKTUARIETIDSKRIFT

1948 - Parts 3 - 4

Contents

E. Kıvıkoskı: Über die Konvergenz des Iterationsverfahrens bei der Berechnung des effektiven Zinsfusses	135
W. Simonsen: On Divided Differences and Osculatory Interpolation	157
ERNST ZWINGGI: Initiation of a Formula for Approximate Valuation of Premiums for Disability Benefits	165
H. Ammeter: A Generalisation of the Collective Theory of Risk in Regard to Fluctuating Basic-Probabilities	171
TRYGGWE SAXÉN: On the Probability of Ruin in the Collective Risk Theory for Insurance Enterprises with only Negative Risk Sums	
H. Wold: On Stationary Point Processes and Markov Chains	22 9

Annual subscription: 10 Swedish Crowns (Approx. \$2.00).

Inquiries and orders may be addressed to the Editor, SKARVIKSVÄGEN 7, DJURSHOLM (SWEDEN)

BIOMETRIKA

Volume XXXVI

Contents

Parts I and II, June 1949
I. The infectiousness of measles. By MAJOR GREENWOOD. II. A note on the analysis of grouped probit data. By K. D. TOCHER. III. A generalization of Poisson's binomial limit for use in ecology. By MARJORIE THOMAS. IV. The estimation and comparison of residual regressions where there are two or more related sets of observations. By A. H. CARTER. V. Cumulants of multivariate multinomial distributions. By JOHN WISHART. VI. On the Wishart distribution in statistics. By A. C. AITKEN. VIII. The spectral theory of discrete stochastic processes. By P. A. P. MORAN. VIII. On a property of distributions admitting sufficient statistics. By V. S. HUZURBAZAR. IX. On a method of trend elimination. By M. H. QUENOUILLE. X. On the estimation of dispersion by linear systematic statistics. By H. J. GODWIN. XI. On the reconciliation of theories of probability. By M. G. KENDALL. XII. The derivation and partition of χ^2 in certain discrete distributions. By H. O. LANCASTER. XIII. A note on the subdivision of χ^2 into components. By J. O. IRWIN. XIV. The first and second moments of some probability distributions arising from points on a lattice and their application. By P. V. KRISHNA IYER. XV. Probability Tables for the range. By E. J. GUMBEL. XVI. Systems of frequency curves generated by methods of translation. By N. L. JOHNSON. XVII. Rank and product-moment correlation. By M. G. KENDALL. XVIII. Tests of significance in harmonic analysis. By H. O. HARTLEY. XIX. The non-central X- and F-distributions and their applications. By P. B. PATNAIK. XX. MISCELLANEA: On a method of estimating frequencies. By D. J. FINNEY. A further note on the mean deviation from the median. By K. R. NAIR. REVIEWS: Theory of probability and Karl Pearson's early statistical pagers.

early statistical papers.

The subscription price, payable in advance, is 45s. inland, 54s. export (per volume including postage). Cheques should be drawn to Biometrika and sent to "The Secretary, Biometrika Office, Department of Statistics, University College, London, W.C. 1." All foreign cheques must be in sterling and drawn on a bank having a London agency.

SANKHYĀ

The Indian Journal of Statistics Edited by P. C. Mahalanobis

Vol. IX, Parts 2 and 3, 1949

Part I, The Field Survey
Part II, Statistical Analysis
Part III, Anthropological Observations

Annual subscription: 30 rupees Inquiries and orders may be addressed to the Editor, Sankhyā, Presidency College, Calcutta, India.

ECONOMETRICA

Journal of the Econometric Society

Contents of Vol. 17, No. 2, April, 1949, include:
Page
COLIN CLARK: A System of Equations Explaining the United States Trade Cycle, 1921 to 1941
TJALLING C. KOOPMANS: Identification Problems in Economic Model Construction
LAWRENCE R. KLEIN: A Scheme of International Compensation
M. H. Ekker: A Scheme of International Compensation: Postscript 150
ANNOUNCEMENTS, NOTES, AND MEMORANDA
·

Published Quarterly

Subscription to Nonmembers: \$9.00 per year

The Econometric Society is an international society for the advancement of economic theory in its relation to statistics and mathematics.

Subscriptions to *Econometrica* and inquiries about the work of the Society and the procedure in applying for membership should be addressed to Alfred Cowles, Secretary and Treasurer, The Econometric Society, The University of Chicago, Chicago 37, Illinois, U.S.A.

THE INSTITUTE OF MATHEMATICAL STATISTICS

(Organized September 12, 1935)

OFFICERS FOR 1949

President:

J. NEYMAN, University of California, Berkeley

President-Elect:

J. L. Doob, The University of Illinois, Urbana

Secretary-Treasurer:

C. H. FISCHER, University of Michigan, Ann Arbor

Editor:

S. S. Wilks, Princeton University, Princeton, N. J.

The purpose of the Institute of Mathematical Statistics is to stimulate research in the mathematical theory of statistics and to promote coöperation between the field of pure research and the fields of application.

Membership dues including subscription to the Annals of Mathematical Statistics are \$7.00 per year within the Western Hemisphere and \$5.00 per year elsewhere. Dues and inquiries regarding membership in the Institute should be sent to the Secretary-Treasurer of the Institute.

MEETINGS OF THE INSTITUTE

ANNUAL MEETING—NEW YORK CITY—December 26-31, 1949

To be held in conjunction with the meetings of the American Statistical Association.

Abstracts must be in the hands of Associate Secretary S. B. Littauer, Department of Industrial Engineering, Columbia University, New York 27, N. Y., not later than November 15.

CHAPEL HILL, N. C., March 17-19, 1950.

Joint Meeting with the Biometric Society. Abstracts of papers in Mathematical Statistics must be in the hands of Professor Herbert Robbins, Department of Mathematical Statistics, Chapel Hill, N. C., not later than February 1. Abstracts of Biometric papers must be in the hands of Professor H. L. Lucas, Department of Experimental Statistics, State College, Raleigh, by February 1.