The Institute of Mathematical Statistics

announces the publication of

Directions in Time Series

Table of Contents

Keynote Address

Can We Predict Where "Time Series" Should Go Next? John W. Tukey

Time Series Models

Parametric Time Series with Some Applications George E. P. Box Maximum Likelihood Estimation for Vector Autoregressive Moving Average Models T. W. Anderson

Computer Packages and Graphics

What Will Your Time Series Analysis Computer Package Do? David J. Pack Time Series Modeling, Spectral Analysis, and Forecasting Emanuel Parzen Some Remarks on Time Series Graphics William S. Cleveland and Douglas M. Dunn

Econometric Models

Some Recent Developments in Seasonal Adjustment David A. Pierce Comments. John Geweke

On the Synthesis of Time Series and Econometric Models C. W. J. Granger Comments. John Geweke Comments. Kenneth F. Wallis

Control Theory and Engineering Applications

On the Identification of State Space Models and Their Use in Control Hirotugu Akaike

System Identification, Kalman Filtering, and Stochastic Control M. B. Priestley

Self-Tuning Algorithms for Control, Prediction and Smoothing Bjorn Wittenmark

Robust Methods

Robust Estimation of Autoregressive Models R. Douglas Martin Comments, Robert B. Miller

Continuous Processes and Periodic Models

Continuous Model Fitting from Discrete Data P. M. Robinson Comments. David A. Dickey

Some Recent Advances in Autoregressive Processes Marcello Pagano Comments, Herbert T. Davis

List Price \$20.00

Order Pre-paid from:

The Institute of Mathematical Statistics 3401 Investment Boulevard, Suite 6 Hayward, California 94545 (USA)

ANNALS OF STATISTICS

Vol. 10	March 1982	No. 1
William Gemmell Cochr	Memorial Article an 1909–1980	G. S. Watson
Special Invited Paper A review of selected topics in multivariate probability inequalities Morris L. Eaton		
	Articles y of P-values	
Natural exponential fam Selecting a minimax esti	nilies with quadratic variance functions imator of a multivariate normal mean	CARL N. MORRIS JAMES O. BERGER
loss	n of several Poisson parameters under k KAM-WAH	Tsui and S. James Press
Diagnostic tests for mul	nodels for survival data with covariates tiple time series models D. S. Posk	ITT AND A. R. TREMAYNE
The evaluation of certai	n quadratic forms occurring in autoregre	essive model fitting R. J. Bhansali
processes	for stationary processes and the param Yuzo Hosoya AN	ID MASANOBU TANIGUCHI
and control of dyna	in stochastic regression models with appring systems Tze Leung I	Lai and Ching Zong Wei
	nrough estimating equations in the nuisa	PEDRO E FERREIRA
	ions	MICHAEL GOLDSTEIN
De Finetti's theorem for	symmetric location families	man and Persi Diaconis
Confidence intervals for	the coverage of low coverage samples	
Nonparametric interval rule	and point prediction using data trimmed	l by a Grubbs-type outlier RONALD W. BUTLER
Qualitative robustness o	f rank tests	HELMUT RIEDER
	ributions: the bootstrap and competitors	
	nimax tests and 2-alternating capacities	
statistic	tion of and critical values for the multiv	rill and Miklós Csörgő
	stimation	
	d least squares estimation in linear and a	C. VILLEGAS
Monotone regression est	noncentral Chi squared or F tests timates for grouped observations	F. T. WRIGHT
Asymptotic distributions	s of slope-of-greatest-convex-minorant es	stimators SUE LEURGANS
	Short Communications	SUE LEURGANS
An inequality comparing	ng sums and maxima with application SIDDHARTHA R. D.	to Behrens-Fisher type
Bounds on mixtures of c	listributions arising in order restricted in	ference
Invariance principles for	TIM ROBE	Pranab Kumar Sen
Covariance stabilizing tr	ansformations and a conjecture of Holla	nd C. C. Song
The consistency of nonli	inear regression minimizing the L ₁ -norm Notes and Corrections	Walter Oberhofer
Uniform asymptotic nor	mality of the maximum likelihood estima	ator T. J. SWEETING
means problem	es of Student's t and of the Behrens-F	G. K. Robinson
Correction to "Simultan	eous confidence bounds"	CHARLES H. ALEXANDER

CATALOG OF PUBLICATIONS OF THE INSTITUTE OF MATHEMATICAL STATISTICS

ANNALS INDEX

The Annals of Mathematical Statistics, Index to Volumes 1-31, 1930-60, edited by J. Arthur Greenwood, Ingram Olkin and I. Richard Savage, 1962. Nonmember Subscriber Cost—\$15.00, Member Cost—\$10.00

Current Index to Statistics: Applications, Methods and Theory, edited by Brian L. Joiner. Volumes 2-5, 1975-77. Nonmember Subscriber Cost—\$22.00, per vol. Member Cost—\$11.00, per vol. Volumes 6-7, 1978-79. Nonmember Subscriber Cost—\$26.00, per vol. Member Cost—\$13.00, per vol.

Order directly from Heebok Park, Treasurer, Business Office, 3401 Investment Blvd., Suite 6, Hayward, California 94545.

STATISTICAL RESEARCH MONOGRAPHS

This series is sponsored jointly by the Insitute of Mathematical Statistics and the University of Chicago. Discount to members of IMS is 20 percent.

The passage problem for a stationary Markov chain by J. H. B. Kemperman, 1961, 127 pp. OUT OF PRINT.

Statistical inference for Markov processes by Patrick Billingsley, 1961, 75 pp. List price—\$5.50 (Midway Reprint paperback only).

Sequential identification and ranking procedures by Robert E. Bechhofer, Jack Kiefer and Milton Sobel, 1968, xvii + 420 pp. List price—\$20.00.

The analysis of frequency data by Shelby J. Haberman, 1974, 432 pp. List price—\$15.00 (Midway Reprint paperback only).

Order directly from the University of Chicago Press, 11030 S. Langley Ave., Chicago, Illinois 60637.

SELECTED TABLES IN MATHEMATICAL STATISTICS

This series of volumes is prepared by the Committee of Mathematical Tables of the Institute of Mathematical Statistics and is published by the American Mathematical Society for the IMS. Discount to members of IMS is 50 percent. Selected tables in mathematical statistics, Vol. I, edited by H. L. Harter and D. B. Owen, 1970, vi + 405 pp. \$13.20.

Selected tables in mathematical statistics, Vol. II, edited by H. L. Harter and D. B. Owen, 1974, viii + 388 pp. \$16.40.

Selected tables in mathematical statistics, Vol. III, edited by H. L. Harter and D. B. Owen with J. M. Davenport, vii + 424 pp. \$21.60.

Selected tables in mathematical statistics, Vol. IV, edited by D. B. Owen and R. E. Odeh with J. M. Davenport, x + 309 pp. \$18.00.

Selected tables in mathematical statistics, Vol. VI, edited by W. J. Kennedy and R. E. Odeh with J. M. Davenport, 1980, viii + 207 pp. \$12.80.

Selected tables in mathematical statistics, Vol. VII, edited by W. J. Kennedy and R. E. Odeh with J. M. Davenport, 1981, viii + 256 pp. \$12.40.

Send prepaid orders directly to the American Mathematical Society, P.O. Box 1571, Providence, Rhode Island 02901, Attention: Sales Department.