

# THE ANNALS of MATHEMATICAL STATISTICS

FOUNDED AND EDITED BY H. C. CARVER, 1930-1938

EDITED BY S. S. WILKS, 1938-1949

THE OFFICIAL JOURNAL OF THE INSTITUTE  
OF MATHEMATICAL STATISTICS

## Contents

	PAGE
Elimination of Randomization in Certain Statistical Decision Procedures and Zero-Sum Two-Person Games. A. DVORETZKY, A. WALD, AND J. WOLFO- WITZ. . . . .	1
On Minimax Statistical Decision Procedures and Their Admissibility. COLIN R. BLYTH . . . . .	22
On Minimum Variance in Nonregular Estimation. R. C. DAVIS. . . . .	43
On the Distribution of Wald's Classification Statistic. HARMAN LEON HARTER. . . . .	58
Ratios Involving Extreme Values. W. J. DIXON. . . . .	68
On Information and Sufficiency. S. KULLBACK AND R. A. LEIBLER. . . . .	79
On the Fundamental Lemma of Neyman and Pearson. GEORGE B. DANTZIG AND ABRAHAM WALD. . . . .	87
Estimators of the Probability of the Zero Class in Poisson and Certain Related Populations. N. L. JOHNSON. . . . .	94
Testing Proportionality of Covariance Matrices. WALTER T. FEDERER. . . . .	102
An Inverse Matrix Adjustment Arising in Discriminant Analysis. M. S. BARTLETT. . . . .	107
Notes:	
On a Theorem of Lyapunov. DAVID BLACKWELL. . . . .	112
A Note on the Test of Serial Correlation Coefficients. MASAMI OGAWARA. . . . .	115
Remark on Separable Spaces of Probability Measures. AGNES BERGER. . . . .	119
Table of the Asymptotic Distribution of the Second Extreme. E. J. GUMBEL AND J. ARTHUR GREENWOOD. . . . .	121
The Distribution of the Maximum Deviation between Two Sample Cumulative Step Functions. FRANK J. MASSEY, JR. . . . .	125
A Note on the Surprise Index. R. M. REDHEFFER. . . . .	128
Approximation to the Point Binomial. BURTON H. CAMP. . . . .	130
A Theorem on the Correlation Coefficient for Samples of Three when the Variables Are Independent. C. CHANDRA SEKAR. . . . .	132
Correction to "The Distribution of Extreme Values in Samples Whose Members Are Subject to a Markoff Chain Condition." BENJAMIN EPSTEIN. . . . .	133
Abstracts of Papers. . . . .	134
News and Notices. . . . .	144
Report of the Chicago Meeting of the Institute. . . . .	149
Minutes of the Annual Membership Meeting, Chicago, December 27, 1950. . . . .	157
Report of the President of the Institute. . . . .	159
Report of the Secretary-Treasurer of the Institute. . . . .	161
Report of the Editor of the Annals. . . . .	163
Publications Received. . . . .	164

Vol. 22, No. 1 — March, 1951