

THE ANNALS
of
MATHEMATICAL
STATISTICS

FOUNDED BY H. C. CARVER

THE OFFICIAL JOURNAL OF THE INSTITUTE OF
MATHEMATICAL STATISTICS

Volume X

1939



CONTENTS OF VOLUME X

ARTICLES

BARTLETT, M. S. Complete Simultaneous Fiducial Distributions.....	129
BROWN, GEORGE W. On the Power of the L_1 Test for Equality of Several Variances.....	119
CRAIG, A. T. On the Mathematics of the Representative Method of Sampling.....	26
DALY, J. F., AND WILKS, S. S. An Optimum Property of Confidence Regions Associated with the Likelihood Function.....	225
DANTZIG, GEORGE B. On a Class of Distributions that Approach the Normal Distribution Function.....	247
DODD, EDWARD L. The Length of the Cycles Which Result from the Graduation of Chance Elements.....	254
EISENHART, C. The Interpretation of Certain Regression Methods and Their Use in Biological and Industrial Research.....	162
GIRSHICK, M. A. On the Sampling Theory of the Roots of Determinantal Equations.....	203
KENDALL, M. G., AND SMITH, B. BABINGTON. The Problem of m Rankings.	275
KENNEY, J. F. The Regression Systems of Two Sums Having Random Elements in Common.....	70
LADERMAN, JACK, AND LOWAN, ARNOLD N. On the Distribution of errors in n th Tabular Differences	360
LENGYEL, B. A. On Testing the Hypothesis that Two Samples Have been Drawn from a Common Normal Population.....	365
LOTKA, ALFRED J. A Contribution to the Theory of Self-Renewing Aggregates, With Special Reference to Industrial Replacement.....	1
LOTKA, ALFRED J. On an Integral Equation in Population Analysis.....	144
LOWAN, ARNOLD N., AND LADERMAN, JACK. On the Distribution of errors in n th Tabular Differences	360
LUKOMSKI, J. On Some Properties of Multi-dimensional Distributions.....	236
MCCARTHY, M. D. On the Application of the z -test to Randomized Blocks	337
NEYMAN, J. On a New Class of "Contagious" Distributions Applicable in Entomology and Bacteriology.....	35
RIETZ, H. L. On the Distribution of the "Student" Ratio for Small Samples from Certain Non-Normal Populations.....	265
SMITH, B. BABINGTON, AND KENDALL, M. G. The Problem of m Rankings..	275

STARKEY, DAISY M. The Distribution of the Multiple Correlation Coefficients in Periodogram Analysis.....	327
TINTNER, G. On Tests of Significance in Time Series.....	139
WALD, A., AND WOLFOWITZ, J. Confidence Limits for Continuous Distribution Functions.....	105
WALD, A. Contributions to the Theory of Statistical Estimation and Testing Hypotheses.....	299
WILKS, S. S., AND DALY, J. F. An Optimum Property of Confidence Regions Associated with the Likelihood Function.....	225
WELCH, B. L. On Confidence Limits and Sufficiency with Particular Reference to Parameters of Location.....	58
WOLFOWITZ, J., AND WALD, A. Confidence Limits for Continuous Distribution Functions.....	105
VON MISES, R. The Limits of a Distribution Function If Two Expected Values are Given.....	99

NOTES

ALTER, DINSMORE. Correction of Sample Moment Bias Due to Lack of High Contact and to Histogram Grouping.....	192
BISHOP, MORRIS C. A Note on Computation for Analysis of Variance....	393
DERKSEN, J. B. D. On Some Infinite Series Introduced by Tschuprow....	380
EISENHART, C. A Note on A Priori Information.....	390
FISHER, R. A. A Note on Fiducial Inference.....	383
FRANKEL, LESTER R., AND STOCK, J. STEVENS. The Allocation of Samplings Among Several Strata	288
GREENWOOD, JOSEPH A., AND GREVILLE, T. N. E. On the Probability of Attaining a Given Standard Deviation Ratio in an Infinite Series of Trials.....	297
GREVILLE, T. N. E., AND GREENWOOD, JOSEPH A. On the Probability of Attaining a Given Standard Deviation Ratio in an Infinite Series of Trials.....	297
HUNTINGTON, E. V. Frequency Distribution of Product and Quotient....	195
JOSEPH, J. A. On the Coefficients of the Expansion of $X^{(n)}$	293
KULLBACK, S. Note on a Matching Problem.....	77
KULLBACK, S. A Note on Neyman's Theory of Statistical Estimation....	388
LADERMAN, JACK. The Distribution of "Student's" Ratio for Samples of Two Items Drawn from Non-Normal Universes.....	376
LARSEN, HAROLD D. On the Moments About the Arithmetic Mean of a Hypergeometric Frequency Distribution Function.....	198
MOOD, A. M. On the L_1 Test for Many Samples.....	187
SMITH, C. D. On Tchebycheff Approximation for Decreasing Functions..	190
STOCK, J. STEVENS, AND FRANKEL, LESTER R. The Allocation of Samplings Among Several Strata.....	288

WERTHEIMER, ALBERT. A Note on Confidence Intervals and Inverse Probability.....	74
---	----

MISCELLANEOUS

Announcement Concerning Computation of Mathematical Tables.....	399
Abstracts of Papers.....	84
Constitution and By-Laws of the Institute.....	91
Directory of the Institute.....	95
Errata.....	202
Report of the Detroit Meeting of the Institute.....	81