

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

VOLUME 31

1960

CONTENTS OF VOLUME 31

ARTICLES

AGGARWAL, OM P. AND IRWIN GUTTMAN. Corrections to "Truncation and Tests of Hypotheses"	1213
ANDERSON, T. W. A Modification of the Sequential Probability Ratio Test to Reduce the Sample Size	165-197
ANSARI, A. R. AND R. A. BRADLEY. Rank-Sum Tests for Dispersions	1174-1189
BAHADUR, R. R. AND R. RANGA RAO. On Deviations of the Sample Mean	1015-1027
BAHADUR, R. R. Some Approximations to the Binomial Distribution Function	43-54
BAHADUR, R. R. Stochastic Comparison of Tests	845-863
BANKIER, J. D. An Operational Approach to the r -Way Crossed Classification	16-22
BEHNKEN, D. W. AND G. E. P. BOX. Simplex-Sum Designs: A Class of Second Order Rotatable Designs Derivable From Those of First Order	838-864
BELL, C. B., DAVID BLACKWELL AND LEO BREIMAN. On the Completeness of Order Statistics	794-797
BELL, C. B. On the Structure of Distribution-Free Statistics	703-709
BHAPKAR, V. P. Confidence Bounds Connected with ANOVA and MANOVA for Balanced and Partially Balanced Incomplete Block Designs	741-748
BIRNBAUM, ALLAN AND WILLIAM C. HEALY, JR. Estimates With Prescribed Variance Based on Two-Stage Sampling	662-676
BIRNBAUM, Z. W. AND R. A. HALL. Small Sample Distributions for Multi-Sample Statistics of the Smirnov Type	710-720
BLACKWELL, DAVID, LEO BREIMAN AND A. J. THOMASIAN. The Capacities of Certain Channel Classes under Random Coding	558-567
BLACKWELL, DAVID, C. B. BELL AND LEO BREIMAN. On the Completeness of Order Statistics	794-797
BLUM, J. R. Werner Gautschi, 1927-1959	557
BOSE, R. C. AND ROY R. KUEBLER, JR. A Geometry of Binary Sequences Associated With Group Alphabets in Information Theory	113-139
BOX, G. E. P. AND D. W. BEHNKEN. Simplex-Sum Designs: A Class of Second Order Rotatable Designs Derivable From those of First Order	838-864
BRADLEY, R. A. AND A. R. ANSARI. Rank-Sum Tests for Dispersions	1174-1189
BREIMAN, LEO. Correction to "The Individual Ergodic Theorem of Information Theory"	809-810

BREIMAN, LEO. The Strong Law of Large Numbers for a Class of Markov Chains	801-803
BREIMAN, LEO, DAVID BLACKWELL AND A. J. THOMASIAN. The Capacities of Certain Channel Classes under Random Coding.	558-567
BREIMAN, LEO, C. B. BELL AND DAVID BLACKWELL. On the Completeness of Order Statistics.	794-797
BURKHOLDER, D. L. Effect on the Minimal Complete Class of Tests of Changes in the Testing Problem.	325-331
CHAKRAVARTI, I. M. AND J. ROY. Estimating the Mean of a Finite Population.	392-398
COBB, WHITFIELD AND S. N. ROY. Mixed Model Variance Analysis with Normal Error and Possibly Non-Normal Other Random Effects, Part I: The Univariate Case.	939-957
COBB, WHITFIELD AND S. N. ROY. Mixed Model Variance Analysis with Normal Error and Possibly Non-Normal Other Random Effects, Part II: The Multivariate Case.	958-968
COHN, RICHARD, FREDERICK MOSTELLER, JOHN W. PRATT AND MAURICE TATSUOKA. Maximizing the Probability that Adjacent Order Statistics of Samples from Several Populations Form Overlapping Intervals.	1095-1104
CORSTEN, L. C. A. Proper Spaces Related to Triangular Partially Balanced Incomplete Block Designs.	498-501
CRAIG, ALLEN T. Our Silver Anniversary.	835-837
DAVID, H. A. A Conservative Property of Binomial Tests.	1205-1207
DAVID, H. A. AND DONALD F. MORRISON. The Life Distribution and Reliability of a System with Spare Components.	1084-1094
DEGROOT, M. H. Minimax Sequential Tests of some Composite Hypotheses.	1193-1200
DEMPSTER, A. P. Random Allocation Designs, I: On General Classes of Estimation Methods.	885-905
DIXON, W. J. Simplified Estimation From Censored Normal Samples	385-391
DRAPER, NORMAN R. Second Order Rotatable Designs in Four or More Dimensions.	23-33
DRAPER, NORMAN R. A Third Order Rotatable Design in Four Dimensions.	865-874
DRAPER, NORMAN R. Third Order Rotatable Designs in Three Dimensions.	875-877
DWYER, PAUL S. Correction to "Generalization of a Gaussian Theorem"	227
FISZ, M. On a Result by M. Rosenblatt Concerning the Von Mises-Smirnov Test.	427-429
FREIMER, MARSHALL AND BERNARD GOLD. Note on the Distribution of Locally Maximal Elements in a Random Sample.	518
FURSTENBERG, H. AND H. KESTEN. Products of Random Matrices.	457-469

GHOSAL, A. Emptiness in the Finite Dam	803-808
GNANADESIKAN, R. Correction to and Comment on "Equality of More Than Two Variances and of More Than Two Dispersion Matrices Against Certain Alternatives"	227-228
GODAMBE, V. P. An Optimum Property of Regular Maximum Likelihood Estimation	1208-1212
GOLD, BERNARD AND MARSHALL FREIMER. Note on the Distribution of Locally Maximal Elements in a Random Sample	518
GRAYBILL, FRANKLIN A. AND V. SESHADRI. On the Unbiasedness of Yates' Method of Estimation using Interblock Information	786-787
GUTTMAN, IRWIN AND OM P. AGGARWAL. Corrections to "Truncation and Tests of Hypotheses"	1213
HALL, R. A. AND Z. W. BIRNBAUM. Small Sample Distribution for Multi-Sample Statistics of the Smirnov Type	710-720
HALPERIN, MAX. Some Asymptotic Results for a Coverage Problem	1063-1076
HARRIS, BERNARD. Probability Distributions Related to Random Mappings	1045-1062
HARTER, H. LEON. Correction to "The Use of Sample Quasi-Ranges in Estimating Population Standard Deviation"	228
HARTER, H. LEON. Tables of Range and Studentized Range	1122-1147
HEALY, WILLIAM C., JR. AND ALLAN BIRNBAUM. Estimates with Prescribed Variance Based on Two-Stage Sampling	662-676
HECK, D. L. Charts of Some Upper Percentage Points of the Distribution of the Largest Characteristic Root	625-642
HEMELRIJK, J. The Statistical Work of David van Dantzig (1900-1959)	269-275
HILL, BRUCE M. A Relationship Between Hodges' Bivariate Sign Test and a Non-Parametric Test of Daniels'	1190-1192
HODGES, J. L., JR. AND LUCIEN LECAM. The Poisson Approximation to the Poisson Binomial Distribution	737-740
HOEFFDING, WASSILY. Lower Bounds for the Expected Sample Size and the Average Risk of a Sequential Procedure	352-368
HOFFMAN, A. J. On the Uniqueness of the Triangular Association Scheme	492-497
IMHOF, J. P. A Mixed Model for the Complete Three-Way Layout with Two Random-Effects Factors	906-925
UTO, KOICHI. Asymptotic Formulae for the Distribution of Hotelling's Generalized T^2 Statistic, II	1148-1153
JAMES, ALAN T. The Distribution of the Latent Roots of the Covariance Matrix	151-158
KARLIN, SAMUEL AND FRANK PROSCHAN. Pólya Type Distributions of Convolutions	721-736
KARLIN, SAMUEL AND DONALD TRUAX. Slippage Problems	296-324
KATTI, S. K. Moments of the Absolute Difference and Absolute Deviation of Discrete Distributions	78-85

KATZ, MELVIN L. AND A. J. THOMASIAN. An Exponential Bound for Functions of a Markov Chain.....	470-474
KEILSON, J. AND A. KOOHARIAN. On Time Dependent Queuing Processes.....	104-112
KESTEN, H. AND H. FURSTENBERG. Products of Random Matrices..	457-469
KOOHARIAN, A. AND J. KEILSON. On Time Dependent Queuing Processes.....	104-112
KOOPMANS, LAMBERT H. Asymptotic Rate of Discrimination for Markov Processes.....	982-994
KRISHNAMOORTHY, A. S. AND M. PARTHASARATHY. Correction to "A Multivariate Gamma-Type Distribution".....	229
KUEBLER, ROY R., JR. AND R. C. BOSE. A Geometry of Binary Sequences Associated With Group Alphabets in Information Theory.....	113-139
LAHA, R. G., E. LUKACS AND M. NEWMAN. On the Independence of a Sample Central Moment and the Sample Mean.....	1028-1033
LAMPERTI, JOHN. The First-Passage Moments and the Invariant Measure of a Markov Chain.....	515-517
LAUBSCHER, NICO F. Normalizing the Noncentral t and F Distributions.....	1105-1112
LECAM, LUCIEN AND J. L. HODGES, JR. The Poisson Approximation to the Poisson Binomial Distribution.....	737-740
LECAM, LUCIEN AND LORRAINE SCHWARTZ. A Necessary and Sufficient Condition for the Existence of Consistent Estimates.....	140-150
LINHART, H. A Measure of Predictive Precision in Regression Analysis.....	399-404
LUKACS, E., R. G. LAHA, AND M. NEWMAN. On the Independence of a Sample Central Moment and the Sample Mean.....	1028-1033
MANN, HENRY B. The Algebra of a Linear Hypothesis.....	1-15
MARSHALL, ALBERT W. AND INGRAM OLKIN. Multivariate Chebyshev Inequalities.....	1001-1014
MARSHALL, ALBERT W. A One-Sided Analog of Kolmogorov's Inequality.....	483-487
MARSHALL, ALBERT W. AND INGRAM OLKIN. A One-Sided Inequality of the Chebyshev Type.....	488-491
MIKHAIL, WADIE F. An Inequality for Balanced Incomplete Block Designs.....	520
MIKHAIL, WADIE F. Acknowledgment of Priority to "An Inequality for Balanced Incomplete Block Designs".....	1213
MILLER, RUPERT G., JR. Priority Queues.....	86-103
MORRISON, DONALD F. AND H. A. DAVID. The Life Distribution and Reliability of a System with Spare Components.....	1084-1094
MOSTELLER, FREDERICK, RICHARD COHN, JOHN W. PRATT AND MAURICE TATSUOKA. Maximizing the Probability that Adjacent	

Order Statistics of Samples from Several Populations Form Overlapping Intervals.....	1095-1104
MOY, SHU-TEH CHEN. Equalities for Stationary Processes Similar to an Equality of Wald.....	995-1000
NADLER, JACK. Inverse Binomial Sampling Plans when an Exponential Distribution is Sampled with Censoring.....	1201-1204
NELSON, EDWARD AND DALE VARBERG. Expectations of Functionals on a Stochastic Process.....	574-578
NEWELL, C. F. Queues for a Fixed-Cycle Traffic Light.....	589-597
NEWMAN, M., R. G. LAHA, AND E. LUKACS. On the Independence of a Sample Central Moment and the Sample Mean.....	1028-1033
NEYMAN, JERZY AND ELIZABETH L. SCOTT. Correction for Bias Introduced by a Transformation of Variables.....	643-655
OLKIN, INGRAM AND ALBERT W. MARSHALL. A One-Sided Inequality of the Chebyshev Type.....	488-491
OLKIN, INGRAM AND ALBERT W. MARSHALL. Multivariate Chebyshev Inequalities.....	1001-1014
PARTHASARATHY, K. R. On the Estimation of the Spectrum of a Stationary Stochastic Process.....	568-573
PARTHASARATHY, M. AND A. S. KRISHNAMOORTHY. Correction to "A Multivariate Gamma-Type Distribution".....	229
PRA BHU, N. U. Application of Storage Theory to Queues with Poisson Arrivals.....	475-482
PRATT, JOHN W. On Interchanging Limits and Integrals.....	74-77
PRATT, JOHN W., RICHARD COHN, FREDERICK MOSTELLER AND MAURICE TATSUOKA. Maximizing the Probability that Adjacent Order Statistics of Samples from Several Populations Form Overlapping Intervals.....	1084-1094
PROSCHAN, FRANK AND SAMUEL KARLIN. Pólya Type Distributions of Convolutions.....	721-736
PYKE, RONALD. Correction to Abstracts "Semi-Markov Processes: Countable State Space" and "Stationary Probabilities for a Semi-Markov Process with Finitely Many States".....	823
PYKE, RONALD. On Centering Infinitely Divisible Processes.....	797-800
RAGHAVARAO, DAMARAJU. On the Block Structure of Certain PBIB Designs with Two Associate Classes having Triangular and L_2 Association Schemes.....	787-791
RAGHAVARAO, DAMARAJU. A Generalization of Group Divisible Designs.....	756-771
RAGHAVARAO, DAMARAJU. Some Aspects of Weighing Designs.....	878-884
RAO, P. V. The Dual of a Balanced Incomplete Block Design.....	779-785
RAO, R. RANGA AND R. R. BAHADUR. On Deviations of the Sample Mean.....	1015-1027
RAO, U. V. R., I. R. SAVAGE AND M. SOBEL. Contributions to the	

Theory of Rank Order Statistics: The Two-Sample Censored Case.....	415-426
RICHTER, DONALD. Two-Stage Experiments for Estimating a Common Mean.....	1164-1173
ROY, J. AND I. M. CHAKRAVARTI. Estimating the Mean of a Finite Population.....	392-398
ROY, S. N. AND WHITFIELD COBB. Mixed Model Variance Analysis with Normal Error and Possibly Non-Normal Other Random Effects, Part I: The Univariate Case.....	939-957
ROY, S. N. AND WHITFIELD COBB. Mixed Model Variance Analysis with Normal Error and Possibly Non-Normal Other Random Effects, Part II: The Multivariate Case.....	958-968
RUBEN, HAROLD. Probability Content of Regions Under Spherical Normal Distributions, I.....	598-618
RUBEN, HAROLD. Probability Content of Regions Under Spherical Normal Distributions, II: The Distribution of the Mean in Normal Samples.....	1113-1121
SACKS, J. Ergodicity of Queues in Series.....	579-588
SARKADI, K. On the Median of the Distribution of Exceedances....	225-226
SAUNDERS, SAM C. Sequential Tolerance Regions.....	198-216
SAVAGE, RICHARD. Contributions to the Theory of Rank Order Statistics: Computation Rules for Probabilities of Rank Orders....	519-520
SAVAGE, I. R., U. V. R. RAO AND M. SOBEL. Contributions to the Theory of Rank Order Statistics: the Two-Sample Censored Case.....	415-426
SCHMETTERER, L. On a Problem of J. Neyman and E. Scott.....	656-661
SCHMETTERER, L. On Unbiased Estimation.....	1154-1163
SCHWARZ, GIDEON. A Class of Factorial Designs with Unequal Cell-Frequencies.....	749-755
SCHWARTZ, LORRAINE AND LECAM, LUCIEN. A Necessary and Sufficient Condition for the Existence of Consistent Estimates.....	140-150
SCOTT, ELIZABETH L. AND JERZY NEYMAN. Correction for Bias Introduced by a Transformation of Variables.....	643-655
SESHADRI, V. AND FRANKLIN A. GRAYBILL. On the Unbiasedness of Yates' Method of Estimation Using Interblock Information....	786-787
SEVERO, NORMAN C. AND MARVIN ZELEN. Graphs for Bivariate Normal Probabilities.....	619-624
SHAH, B. V. Balanced Factorial Experiments.....	502-514
SHAH, B. V. A Matrix Substitution Method of Constructing Partially Balanced Designs.....	34-42
SHAH, K. R. Optimality Criteria for Incomplete Block Designs.....	791-794
SHAPIRO, J. M. Sums of Small Powers of Independent Random Variables.....	222-224
SIDDIQUI, M. M. Tests for Regression Coefficients When Errors are Correlated.....	926-938

SKIBINSKY, MORRIS. Some Properties of a Class of Bayes Two-Stage Tests	332-351
SOBEL, M., U. V. R. RAO AND I. R. SAVAGE. Contributions to the Theory of Rank Order Statistics: The Two-Sample Censored Case	415-426
STECK, G. P. Acknowledgment of Priority to "A Uniqueness Property Not Enjoyed by the Normal Distribution"	523
TATSUOKA, MAURICE, RICHARD COHN, FREDERICK MOSTELLER AND JOHN W. PRATT. Maximizing the Probability that Adjacent Order Statistics of Samples from Several Populations Form Overlapping Intervals	1095-1104
TEICHER, HENRY. On the Mixture of Distributions	55-73
THOMASIAN, A. J. Elementary Proof of the AEP of Information Theory	452-456
THOMASIAN, A. J. AND MELVIN L. KATZ. An Exponential Bound for Functions of a Markov Chain	470-474
THOMASIAN, A. J., DAVID BLACKWELL AND LEO BREIMAN. The Capacities of Certain Channel Classes under Random Coding	558-567
TRUAX, DONALD AND SAMUEL KARLIN. Slippage Problems	296-324
UZAWA, HIROFUMI. Locally Most Powerful Rank Tests for Two-Sample Problems	685-702
VAN DER WAERDEN, B. L. Sampling Inspection as a Minimum Loss Problem	369-384
VARBERG, DALE AND EDWARD NELSON. Expectations of Functionals on a Stochastic Process	574-578
VARTAK, MANOHAR NARHAR. Relations Among the Blocks of the Kronecker Product of Designs	772-778
VOGEL, WALTER. An Asymptotic Minimax Theorem for the Two Armed Bandit Problem	444-451
VOGEL, WALTER. A Sequential Design for the Two Armed Bandit . .	430-443
VOTAW, D. F., JR. Statistical Programming	1077-1083
WALLACE, DAVID L. Correction to "Bounds on Normal Approximations to Student's and the Chi-Square Distributions"	810
WARREN, RICHARD. An Associated Polynomial for Least Squares Approximations	969-981
WEISS, LIONEL. Two-Sample Tests for Multivariate Distributions . .	159-164
WENDEL, J. G. Order Statistics of Partial Sums	1034-1044
WIJSMAN, ROBERT A. A Monotonicity Property of the Sequential Probability Ratio Test	677-684
WITTING, H. A Generalized Pitman Efficiency for Non-Parametric Tests	405-414
WORMLEIGHTON, R. A Useful Generalization of the Stein Two-Sample Procedure	217-221
ZELLEN, MARVIN, AND NORMAN C. SEVERO. Graphs for Bivariate Normal Probabilities	619-624

MISCELLANEOUS

Abstracts of Papers	230-246, 524-539, 811-822, 1215-1217
News and Notices	247-268, 540-556, 824-834, 1219-1254
Doctoral Dissertations in Statistics	549-552, 830
Questionnaire Concerning the <i>Annals</i>	1238-1243
Statement of Committee on Exchanges	1235-1238
Report of the President for 1959	552
Report of the Secretary for 1959	266
Report of the Editor for 1959	266-267
Report of the President for 1960	1243-1244
Report of the Treasurer for 1960	1244-1247
Report of the Editor for 1960	1247-1249
Report of the Washington, D. C. Meeting, December 27-30, 1959 . .	259-266
Report of the Lafayette, Indiana Meeting, April 7-9	553-556
Report of the New York City Meeting, April 21-23	831-833
Report of the Stanford, California Meeting, August 23-26	1249-1254
Publications Received	268, 556, 833-834, 1254

Index of Abstracts for 1960

- ADDELMAN, SIDNEY, 230
ALBERT, ARTHUR, 811
ANDERSON, VIRGIL L. AND CECIL L. KALLER, 525
BAGG, JOHN L., 231
BAHADUR, R. R., 1215
BECHHOFFER, ROBERT E., 231
BELL, C. B., 811-12
BENES, V. E., 231, 531, 811
BERMAN, SIMEON M., 812
BESSLER, STUART, 812
BIRNBAUM, ALLAN, 531, 1216-1217
BOSE, R. C., 813
BOSE, R. C., I. M. CHAKRAVARTI, AND D. E. KNUTH, 813
BRUNK, H. D., 814
BUEHLER, R. J., 232
BURKHOLDER, D. L., 232
BURR, IRVING W., 524
CHAKRAVARTI, I. M., 531
CHAKRAVARTI, I. M., R. C. BOSE AND D. E. KNUTH, 813
CHAKRAVARTI, I. M. AND J. ROY, 241
CHATTERJI, S. D., 232
CHRISTENSEN, INGE, 233
COHEN, CLIFFORD, A., 532
COMMINS, WILLIAM D., 532
CROTEAU, ANDRÉ AND JACQUES ST-PIERRE, 814
DAVIS, R. C., 814
DAWSON, REED, 1215
DEGROOT, MORRIS H., 233
DORFF, MARTIN AND JOHN GURLAND, 233
EICKER, FRIEDHELM, 234, 1215-1216
EISENBERG, HERBERT B., 532
FERGUSON, THOMAS S., 533
FOX, MARTIN AND HERMAN RUBIN, 234
GART, JOHN J., 234
GHURYE, SUDHISH G., 524
GOLD, RUTH Z., 533
GRAYBILL, FRANKLIN A. AND ROBERT D. MORRISON, 814
GRAYBILL, FRANKLIN A. AND V. SESHADRI, 815
GRAYBILL, FRANKLIN A. AND ROBERT A. HULTQUIST, 816
GRAYBILL, FRANKLIN A. AND DAVID L. WEEKS, 821, 822
GREENBERG, B. G., S. N. ROY AND A. E. SARHAN, 242
GROLL, PHYLLIS A. AND MILTON SOBEL, 243
GUMBEL, E. J., 1216
GUPTA, S. S., 235
GUPTA, S. S. AND M. SOBEL, 235, 236, 815
GURLAND, JOHN, 233, 526
GURLAND, JOHN AND MARTIN DORFF, 233
GUTTMAN, IRWIN, 1216
HALL, WILLIAM JACKSON, 524
HALPERIN, MAX, 236
HAMMERLE, K. J. AND W. M. STONE, 243
HANNAN, E. J., 533
HANNAN, J. AND W. HARKNESS, 525
HARKNESS, WILLIAM, 525, 534
HARKNESS, W. AND J. HANNAN, 525
HARTER, H. LEON, 525, 815, 816
HODGES, J. L. JR., AND E. L. LEHMANN, 816
HOGG, ROBERT V., 236
JOHN, PETER W. M., 816
KABE, D. G., 817
KALLER, CECIL L. AND VIRGIL ANDERSON, 525, 534
KATTI, S. K., 817
KATTI, S. K. AND JOHN GURLAND, 526

- KIEFER, J., 245
KLOTZ, JEROME, 817
KNUTH, D. E., R. C. BOSE AND I. M. CHAKRAVARTI, 813
KRISHNAIAH, P. R. AND S. N. ROY, 537
KRISHNAIAH, P. R. AND V. K. MURTHY, 237
KRISHNAIAH, P. R., S. N. ROY AND S. S. SHRIKHANDE, 242
KRISHNAIAH, P. R. AND M. M. RAO, 237
LAHA, R. G. AND E. LUKACS, 237
LANCASTER, H. O., 818
LARSON, HAROLD J. AND T. A. BANCROFT, 818
LASMAN, L. L. AND E. J. WILLIAMS, 237
LAURENT, ANDRE G., 238, 526
LECHNER, JAMES A., 238
LEHMAN, EUGENE H., JR., 1216
LEHMANN, E. L. AND J. L. HODGES, JR., 816
LEONE, F. C., Y. H. RUTENBERG AND C. W. TOPP, 818
LEVENE, HOWARD, 534
LIEBLEIN, JULIUS, 238
LUKACS, EUGENE, 237, 239
MASTERTON, GREGORY E. AND SEYMOUR SHERMAN, 239
MCCUE, EDMUND M., 239
MCFADDEN, J. A., 526, 527
MIKHAIL, WADIE F., 535, 818
MIKHAIL, W. F. AND S. N. ROY, 536
MOHANTY, S. G. AND T. V. NARAYANA, 819
MORRISON, ROBERT D. AND FRANKLIN A. GRAYBILL, 814
MURTHY, V. K. AND P. R. KRISHNAIAH, 237
MURTHY, V. K., 239
NARAYANA, T. V. AND S. G. MOHANTY, 819
PATIL, G. P., 240, 527
PYKE, RONALD, 240, 245, 535, 0000
QUADE, DANA, 535
RAMACHANDRAN, B., 240
RAO, J. N. K., 819
RAO, M. M., 819
RAO, M. M. AND P. R. KRISHNAIAH, 237
RAO, R. RANGA, 241
RAY-CHAUDHURI, D. K., 527, 536
RIDER, PAUL R., 241
ROBBINS, HERBERT, 241
ROY, S. N., 242
ROY, J. AND I. M. CHAKRAVARTI, 241
ROY, S. N. AND P. R. KRISHNAIAH, 537
ROY, S. N. AND W. F. MIKHAIL, 536
ROY, S. N., B. G. GREENBERG AND A. E. SARHAN, 242
ROY, S. N., S. S. SHRIKHANDE AND P. R. KRISHNAIAH, 242
ROY, S. N., AND J. N. SRIVASTAVA, 538
RUBEN, HAROLD, 524
RUBIN, HERMAN, 242, 528
RUBIN, HERMAN AND MARTIN FOX, 234
RUTENBERG, Y. H., F. C. LEONE AND C. W. TOPP, 818
SACKS, JEROME, 246
SARHAN, A. E., S. N. ROY AND B. G. GREENBERG, 242
SCHEUER, ERNEST M., 537
SCHWARZ, GIDEON, 537
SEIDEN, ESTHER, 820
SESHADRI V. AND FRANKLIN A. GRAYBILL, 815
SEVERO, NORMAN C. AND MARVIN ZELLEN, 820
SHERMAN, SEYMOUR AND GREGORY E. MASTERTON, 239
SHRIKHANDE, S. S., S. N. ROY AND P. R. KRISHNAIAH, 242
SIDDIQUI, M. M., 528, 820
SKIBINSKY, MORRIS, 538
SOBEL, MILTON, 243

- SOBEL, MILTON AND PHYLLIS A. GROLL, 243
- SOBEL, MILTON AND S. S. GUPTA, 235, 236, 815
- SORENSEN, FREDERICK A., 821
- SRIVASTAVA, J. N. AND S. N. ROY, 538
- ST-PIERRE, JACQUES AND ANDRÉ CROTEAU, 814
- STAPLETON, JAMES H., 528
- STARR, SELIG, 529
- STONE, W. M. AND K. J. HAMMERLE, 243
- SUKHATME, B. B., 529
- SUKHATME, SHASHIKALA B., 529
- TEICHER, HENRY, 243, 538
- TISCHENDORF, J. A., 530
- THOMPSON, WILLIAM A., JR. 244, 1217
- TOPP, C. W., F. C. LEONE AND Y. H. RUTENBERG, 818
- WEEKS, DAVID L. AND FRANKLIN A. GRAYBILL, 821, 822
- WESLER, OSCAR, 244
- WHITE, JOHN S., 530, 822
- WIJSMAN, ROBERT A., 530
- WIJSMAN, R. A. AND D. L. BURKHOLDER, 232
- WILLIAMS, E. J. AND L. L. LASMAN, 237
- WILLIAMS, W. H., 539
- YLVISAKER, N. DONALD, 244, 539, 822
- ZELÉN, M. AND B. KURKJIAN, 822
- ZELÉN, MARVIN AND NORMAN C. SEVERO, 820
- ZYSKIND, GEORGE, 245