"Estimation of Parameters of Mixed Exponentially Distributed Failure Time Distributions from Censored Life Test Data."

Paul Dixon Minton, North Carolina State College, major in experimental statistics, "Some Distributions Related to Column Totals in Sociometric Matrices."

Robert Dean Morrison, North Carolina State College, major in experimental statistics, "Some Studies on the Estimates of the Exponents in Models Containing One and Two Exponentials."

Vasant Lakshman Mote, North Carolina State College, major in experimental statistics, "An Investigation of the Effect of Misclassification on the χ^2 Tests in the Analysis of Categorical Data."

Mangalore V. Pai, Purdue, major in statistics, "Comparisons of the Methods of Classification."

Robert N. Pendergrass, Virginia Polytechnic Institute, major in statistics, "The Rank Analysis of Triple Comparisons."

Robert Richard Read, University of California, Berkeley, major in statistics, "Contributions to the Statistical Theory of Cloud Chamber Data."

Robert H. Riffenburgh, Virginia Polytechnic Institute, major in statistics, "Linear Discriminant Analysis."

Judah I. Rosenblatt, Columbia, major in mathematical statistics, "Goodness-of-Fit Tests for Approximate Hypotheses."

Mandakini Janardan Sane, University of California, Berkeley, major in statistics, "I. Locally Unbiased Tests of Composite Hypotheses with s Contraints."

James H. Stapleton, Purdue, major in statistics, "On the Theory of Asymptotic Distributions (mod 1) and Its Extension to Abstract Spaces."

James G. C. Templeton, Princeton, major in statistics, "A Test for Detecting Single-cell Disturbances in Contingency Tables."

J. B. Tysver, University of Michigan, "Inherent errors in matrices with statistical applications."

Dirk van der Reyden, North Carolina State College, major in experimental statistics, "The Use of Orthogonal Polynomial Contrasts in the Confounding of Factorial Experiments."

J. W. Walker, University of North Carolina, "Optimal decomposition of a sample space for estimations based on grouped data."

David Zeitlen, University of Minnesota, major in mathematics; minor statistics, "Behavior of Conformal Maps under Analytic Deformation of the Domain."

Alexis Zinger, University of Montreal, major in mathematical statistics, "On the Choice of the Best Amongst Three Normal Populations with Known Variances."

REPORT OF THE GATLINBURG, TENNESSEE MEETING OF THE INSTITUTE

The 1958 Eastern Regional Meeting, seventy-seventh meeting of the Institute of Mathematical Statistics, was held in Gatlinburg, Tennessee on April 10–12, 1958, in conjunction with the Biometric Society (Eastern North American Region).

The following 118 members of the Institute registered for the meeting:

G. E. Albert, Mrs. G. E. Albert, G. N. Alexander, Williard O. Ash, G. J. Atta, Earl Atwood, R. E. Bargman, V. P. Bhapkar, Allan Birnbaum, Barbara Bishop, C. I. Bliss, V. J. Bofinger, R. C. Bose, G. E. P. Box, R. A. Bradley, A. E. Brandt, Ellis Brenna, W.

N. Carey, Jr., Charles Carroll, D. Chaudhuri, Victor Chew, Mary Ann Cipolloni, A. Bruce
Clarke, W. H. Clatworthy, Charles W. Clunies-Ross, A. C. Cohen, W. D. Commins, W. E.
Conner, William S. Connor, Dennis Cooke, Richard Cornell, Jerome Cornfield, L. C. A.
Corsten, Constance Cox, Edwin L. Cox, Gertrude M. Cox, J. B. Cox, Elliot M. Cramer,
Jonas M. Dalton, H. A. David, Earl Diamond,. N. Draper, J. R. Duffett, David Duncan,
Arthur M. Dutton, Lila Elveback, Jean Engler, A. L. Finkner, Jack Fleischer, S. M. Free,
Rudolph J. Freund, Donald A. Gardiner, John J. Gart, A. Garzadela, E. Gehan, S. Geisser
H. Ginsburg, W. Glenn, R. Gnanadesikian, Arnold Grandage, J. E. Grizzle, Joan M. Gur-
ian, M. A. Guzman, R. J. Hader, W. Haenszel, W. J. Hall, Eugene K. Harris, Boyd Harsh-
barger, Hubert Hill, Wassily Hoeffding, R. G. Hoffman, Harold Hotelling, W. H. Horton,
J. F. Hudson, David Hurst, Paul E. Irick, M. A. Kastenbaum, Therese Kelleher, George
Kennedy, Allyn W. Kimball, Marcus Kjelsberg, Carl F. Kossack, Roy R. Kuebler, R. G.
Laha, E. L. LeClerg, G. J. Levenbach, H. L. Lucas, Eugene Lukacs, Mary Lum, Nathan
Mantel, Frank Martin, Margaret P. Martin, P. A. Miller, D. F. Morrison, George Mor-
ton, V. K. Murthy, M. D. Nefzger, George E. Nicholson, Jr., Paul S. Olmstead, D. Quade,
H. F. Robinson, A. C. Rohloff, J. B. Roy, Charles F. Sarle, M. A. Schneiderman, Oliver A.
Shaw, S. S. Shrikhande, Paul Somerville, D. E. South, Harold Storz, R. J. Taylor, George
W. Thomson, Malcolm Turner, Ronald E. Walpole, G. S. Watson, M. B. Wilk, E. J.
Williams, R. Lowell Wine.

The program of the meeting was as follows:

THURSDAY, APRIL 10, 1958

9:00–10:00 A.M.—Registration
9:00–10:00 A.M.—Biometric Society Regional Advisory Board Meeting
10:00–12:00 A.M.—Non-Linear Estimation

Chairman: R. LOWELL WINE, Hollins College
　　1. *Some Recent Work on Non-Linear Estimation and Design*, G. E. P. Box, Princeton
　　　　University
　　2. *Estimation for Linear Combinations of Exponentials*, R. G. CORNELL, United States
　　　　Public Health Service
　　3. *Non-Linear Hypotheses*, M. B. WILK, Bell Telephone Laboratories

1:45–3:45 P.M.—Design of Experiments

Chairman: W. M. CLATWORTHY, Westinghouse Electric Corporation
　　1. *Use of the Direct Product of Matrices in the Analysis of Factorials*, W. S. CONNOR,
　　　　National Bureau of Standards and R. C. BOSE, University of North Carolina
　　2. *Analysis of Variance of a Randomized Block Design with Missing Observations*, W. A.
　　　　GLENN and CLYDE Y. KRAMER, Virginia Polytechnic Institute

4:00–6:00 P.M.—Contributed Papers I (I.M.S.)

Chairman: DUDLEY SOUTH, University of Florida
　　1. *An Upper Bound for the Variance of Certain Statistics*, WASSILY HOEFFDING, Uni-
　　　　versity of North Carolina
　　2. *A Markov Chain Resulting from a Certain Sorting Problem*, A. BRUCE CLARK, Uni-
　　　　versity of Michigan
　　3. *Second Order Rotatable Designs in Three or More Factors*, R. C. BOSE and NORMAN
　　　　R. DRAPER, University of North Carolina
　　4. *An Optimum Property of Some Bechhofer-Type Non-Sequential Multiple-Decision
　　　　Rules*, WILLIAM JACKSON. HALL, University of North Carolina

5. *Useful Bayes Solutions for Multiple Comparisons Problems. I. Preliminary Report*, DAVID B. DUNCAN, University of North Carolina

6. *On the Laws of Cauchy and Gauss*, R. G. LAHA, Catholic University

7. *Tests on a Variance-Covariance Matrix*, NATHAN MANTEL, National Cancer Institute, and SEYMOUR GEISSER, National Institute of Mental Health

8. *On the Simple von Neumann Model of Dynamic Economic Equilibrium as a Markov Chain (Preliminary Report)*, DAVID ROSENBLATT, American University (By title)

9. *On a Test for the Equality of Several Means*, D. V. RAMACHANDRAM, Demographic Training and Research Centre, Bombay, India (By title)

10. *On a Test for the Equality of Several Variances*, K. V. RAMACHANDRAM, Demographic Training and Research Centre, Bombay, India (By Title)

11. *Fitting the Logistic by Maximum Likelihood*, J. L. HODGES, JR., University of California, Berkeley (By Title)

8:00–9:00 P.M.—Special Invited Address (The Biometric Society)

Chairman: A. W. KIMBALL, Oak Ridge National Laboratory
The First Decade of the Biometric Society, C. I. BLISS, Connecticut Agricultural Experiment Station and Yale University

9:00 P.M.—Smoker

Host: The Union Carbide Nuclear Company

FRIDAY, APRIL 11, 1958

8:30–10:30 A.M.—Special Topics I

Chairman: DONALD A. GARDINER, Oak Ridge National Laboratory
1. *Some Topics in the Analysis of Contingency Tables*, V. L. MOTE, M. V. PAVATE and R. L. ANDERSON, North Carolina State College. (Presented by E. J. Williams, A. Grandage and V. J. Bofinger)
2. *Optimum Allocation for Estimation of Polynomial Regression*, E. J. WILLIAMS, North Carolina State College

10:45 A.M.–12:15 P.M.—Contributed Papers II (The Biometric Society)

Chairman: JACK FLEISCHER, North Carolina State College
1. *Triangle, Duo-Trio, and Difference-From-Control.Tests in Taste Testing*, RALPH A. BRADLEY, Virginia Polytechnic Institute.
2. *A Sequential Decision Procedure for Comparing Survival Curves*, JOHN J. GART, Oak Ridge National Laboratory and Virginia Polytechnic Institute
3. *On Problems in Residual Analysis*, RUDOLF J. FREUND and RICHARD W. VAIL, JR., Virginia Polytechnic Institute
4. *Mixed Exponential Failure Distributions*, C. W. CLUNIES-ROSS, Virginia Polytechnic Institute
5. *Estimation of System Reliability from Component Reliabilities*, JAMES R. DUFFETT, Virginia Polytechnic Institute

1:45–3:45 P.M.—Applications in the Physical Sciences

Chairman: CARL KOSSACK, Purdue University
Statistical Activity in the AASHO Road Test, W. N. CAREY, JR., Chief Engineer for Research, and P. E. IRICK, Chief, Data Analysis Branch, Highway Research Board, American Association of State Highway Officials Road Test

4:00–6:00 P.M.—Statistical Genetics

Chairman: H. F. ROBINSON, North Carolina State College
1. *Estimation of Sperm Frequencies in Drosophila,* M. A. KASTENBAUM, Oak Ridge National Laboratory
2. *Adaptation of High-Speed Computing Machines for Empirical Selection Studies,* F. G. MARTIN, JR., and C. C. COCKERHAM, North Carolina State College
3. *Estimation and Use of Genotype-Environmental Interaction Components of Variance in Cotton Breeding,* P. A. MILLER, J. C. WILLIAMS and H. F. ROBINSON, North Carolina State College
4. *A Synthesis of Diallel Cross Methodology,* THERESE KELLEHER, United States Department of Agriculture

8:00–10:00 P.M.—Special Invited Address (I.M.S.)

Chairman: HAROLD HOTELLING, University of North Carolina
   On the Construction of Error Detecting and Error Correcting Binary Codes, R. C. BOSE, University of North Carolina

SATURDAY, APRIL 12, 1958

8:30–10:30 A.M.—Special Topics II

Chairman: BOYD HARSHBARGER, Virginia Polytechnic Institute
1. *Paired Comparisons and Tournaments,* H. A. DAVID, Virginia Polytechnic Institute
2. *Dependence in Multivariate Analysis,* R. E. BARGMANN, Virginia Polytechnic Institute.

PUBLICATIONS RECEIVED

STECK, G. P., *Upper Confidence Limits for the Failure Probability of Complex Networks,* SC-4133(TR), Sandia Corporation, Albuquerque, New Mexico, $1.25.

Boletin de la Sociedad Matematica Mexicana, Sociedad Matematica Mexicana, Tacuba 5, Mexico 1, D. F. Mexico.

Anuario Estadistico de Espana, 1957, Presidencia del Gobierno, Instituto Nacional de Estadistica, Ferraz 41, Madrid, Spain.

DuBois, PHILIP H., *Multivariate Correlational Analysis,* Harper and Brothers, 49 East 33D Street, New York 16, New York. pp. vii-202. $4.50.

EVES AND NEWSOM, *The Foundations and Fundamental Concepts of Mathematics,* Rinehart and Company, Inc., 232 Madison Ave., New York 16, New York. ix-363, $6.75.

DORFMAN, ROBERT, PAUL A. SAMUELSON AND ROBERT M. SOLOW, *Linear Programming and Economic Analysis,* McGraw-Hill Book Company, 330 West 42nd Street, New York 36, New York. v-527, $10.00.

System Design of Digital Computers at the National Bureau of Standards: Methods for High-Speed Addition and Multiplication. National Bureau of Standards Circular 591, issued February 14, 1958, 22 pages, 20 cents. (Order from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.)

Further Contributions to the Solution of Simultaneous Linear Equations and the Determination of Eigenvalues, National Bureau of Standards Applied Mathematics Series 49, issued January 15, 1958, 81 pages, 50 cents. (Order from the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C.)