

## NEWS AND NOTICES

*Readers are invited to submit to the Treasurer of the Institute news items of interest*

### Personal Items

Edgar P. King, D.Sc., was recently promoted to director of the scientific services division by Eli Lilly and Company. Before joining Eli Lilly and Company Dr. King was employed by the National Bureau of Standards, Washington, D. C.

Professor Paul L Meyer of Washington State University will spend the academic year of 1967-68 in the Department of Mathematics at the University of Washington in Seattle on a visiting appointment. After his return, he will resume his duties as Managing Editor of the *Annals*.

Stanley L. Selove has received the Ph.D. degree in Mathematical Statistics from Columbia University and is employed as Research Associate in the Department of Statistics at Stanford University.

### New Members

- Badhe, Sahadeo Kavtik**, M.Sc., (University of Poona); Graduate Student, Department of Statistics, University of Connecticut.
- Belkin, Barry**, M.A., (University of Pennsylvania); Graduate Student, Cornell University.
- Berg, Sven Viggo**, Fil.Lic., (University of Göteborg); Lecturer, Department of Statistics, University of Göteborg.
- Berry, David W.**, B.S., (University of Texas); Graduate Research Assistant, Institute of Statistics, Texas A & M University.
- Chowadee, Aporn**, B.Com., (Chulalong Korn University, Thailand); Graduate Student, Department of Statistics, North Carolina State University, Raleigh.
- Cootes, Kent L.**, B.A., (Pennsylvania State University); Mathematician, National Security Agency; 4401 Lee Highway #21, Arlington, Virginia, 22207.
- Garabedian, Vahakn**, Licence es Sciences (Paris); Engineer, Electricite of France Direction des Studies est Recherches, Electricite of France, Seine.
- Hackleman, Ronald Paul**, Ph.D., (Carnegie Institute of Technology); Research Associate, Department of Statistics, Carnegie Institute of Technology.
- Hariton, George J.**, B.Sc., (McGill University); Graduate Student, Princeton University.
- Jun-mo, Nam**, M.S., (University of Washington); Research Associate, University of Washington.
- Kerr, John D.**, B.S., (University of Queensland, Australia); Experimental Officer I, Division of Mathematical Statistics, Commonwealth Scientific and Industrial Research Organization, Australia.
- Lindgren, Georg**, B.Sc., (University of Lund, Sweden); Assistant, Department of Mathematical Statistics, Lund Institute of Technology, Sweden.
- Mesoella, Ronald E.**, B.S., (University of Rochester); Engineering Aide, Xerox Corporation.
- Ord, Keith**, Ph.D., (University of London); Research Assistant, University of Bristol.
- Pages, Jean Pierre**, Licencie de Mathematiques, (Faculte des Science de Paris); Ingeieur, Commissariat a l'energie Atomique, CEN-FAR, Fontenay aur Roses.
- Ramberg, John S.**, M.S., (Cornell University); Research Assistant, Cornell University.
- Ruiz-Moncayo, Alberto**, Mathematician, (University of Mexico); Graduate Student, Statistics Department, University of California, Berkeley.
- Sardella, Vincent**, M.S., (Adelphi University); Member Technology Staff, Research Analysis Corporation; 11204 Belmont Drive, Fairfax, Virginia.

- Schweitz, Robert Michael**, B.S., (Case Institute of Technology); Senior Analyst, Planning Research Corporation, Washington, D. C.
- Shibata, Yoshisada**, B.E., (University of Tokyo); Assistant, Department of Mathematics, University of Tokyo.
- Smith, David W.**, B.A., (Texas A & M University); Student, Institute of Statistics, Texas A & M University.
- Sugg, Merritt N. Jr.**, B.S., (University of North Carolina); Systems Analyst, RCA/MTP C. W. Radar Systems Analysis; 2601 Hereford Road, Eau Gallie, Florida.

### WILCOXON MEMORIAL LECTURES

A program of Frank Wilcoxon Memorial Lectures has completed its first year at the Florida State University. A grant from the General Electric Corporation to honor the memory of Frank Wilcoxon has permitted the Department of Statistics at the Florida State University to invite three distinguished statisticians to Tallahassee this year. Each visitor, Professor G. E. P. Box in January, Professor Herman Chernoff in March, and Professor Frank Spitzer in May, spent one week at the Florida State University meeting with faculty and students as well as giving three Memorial Lectures. A similar program is being planned for 1968.

### SIX-DAY COURSE ON RELIABILITY AND MAINTAINABILITY PROBLEMS

A six-day intensive course in "Applications of Mathematics and Statistics to Reliability and Maintainability Problems" will be given November 27th through December 2nd at the Sheraton West, Los Angeles, California, by Crowell Collier Institute of Continuing Education.

The special program is designed for professional engineers, mathematicians and scientists.

Limited to professionals working in areas of reliability, quality control, operations research and statistics, the course will be conducted by two of the country's leading specialists in the field—Dr. Benjamin Epstein, statistical consultant, and Dr. Frank Proschan of the Mathematics Research Laboratory, Boeing Scientific Research Laboratories, Seattle, Washington.

Further information on the program can be obtained from Dr. Aaron Feinsot, Director, Crowell Collier Institute of Continuing Education, 866 Third Avenue, New York, N. Y. 10022. Telephone (212) 935-3250.

### REPORT OF THE ATLANTA, GEORGIA MEETING OF THE INSTITUTE OF MATHEMATICAL STATISTICS

The one-hundred-fourteenth meeting of the Institute of Mathematical Statistics was held at the Georgia Institute of Technology, Atlanta, Georgia on April 3-5, 1967, in conjunction with the Biometric Society, Eastern North American Region and the American Statistical Association, Section on Physical and Engineering Sciences.

A total of 302 persons registered for the meetings. Of this number, 140 were members of the Institute.

## PROGRAM

Monday, April 3, 1967

## 9:00 a.m.—11:00 a.m.—Contributed Papers I

Chairman: R. E. BARGMANN, University of Georgia

1. *Nonparametric Confidence Intervals for a Scale Parameter*, G. E. NOETHER, Boston University.
2. *Estimation of Two Ordered Translation Parameters*, S. BLUMENTHAL, New York University, and A. COHEN, Rutgers—The State University.
3. *Estimation of the Larger Translation Parameter*, S. BLUMENTHAL, New York University, and A. COHEN, Rutgers—The State University.
4. *Exact Bahadur Efficiency for the Kolmogorov-Smirnov and Kuiper One- and Two-Sample Statistics*, I. G. ABRAHAMSON, Columbia University.
5. *Monotone Convergence of Binomial Probabilities with an Application to M. L. Estimator*, K. JOGDEO, Courant Institute of Mathematical Sciences.
6. *Tests for a Specified Correlation Matrix*, M. A. AITKIN, K. H. REINFURT and W. C. NELSON, Psychometric Laboratory, University of North Carolina and Virginia Polytechnic Institute.
7. *Inference with Tested Priors*, V. B. WAIKAR and S. K. KATTI, Florida State University.
8. *Testing for Clusters in a Poisson Process*, E. ROTHMAN, Johns Hopkins University (introduced by G. S. Watson).

## 1:00 p.m.—2:45 p.m.—Statistical Models

Chairman: C. F. KOSSACK, University of Georgia

1. *Model Building in Forecasting a Case Study*, R. L. CHADDHA, Bell Telephone Laboratories.
2. *Models of Leukemia: Mice and Men*, M. ZELEN, National Cancer Institute.
3. *Comparison Between Models for Equatorial Distributions on a Sphere*, B. SELBY, Bell Telephone Laboratories.

Discussant: R. E. BARGMANN, University of Georgia

## 3:00 p.m.—5:00 p.m.—Variance Components (IMS, ENAR)

Chairman: F. C. LEONE, University of Iowa

1. *Correlated Errors in the Random Model: The Identification of Unidentifiable Parameters*, B. M. HILL, University of Michigan.
2. *Some Recent Developments in Non-Balanced Designs to Estimate Variance Components*, R. L. ANDERSON, University of Georgia.

Discussant: N. L. JOHNSON, University of North Carolina.

## 3:00 p.m.—5:00 p.m.—Contributed Papers II

Chairman: J. W. DRANE, Emory University

1. *On an Inverse Gaussian Process*, M. T. WASAN, Queen's University.
2. *A Test of Goodness of Fit Based on Sample-spacings*, J. R. GEBERT and B. K. KALE, Iowa State University.
3. *Order Statistics for Exchangeable Variates*, H. A. DAVID and P. C. JOSHI, University of North Carolina.
4. *On a Class of Rank Order Tests for Independence in Multivariate Distributions*, M. L. PURI, and P. K. SEN, University of North Carolina.

5. *Some Properties of the Sample Coefficient of Variation*, B. IGLEWICZ and R. H. MYERS, Western Reserve University and Virginia Polytechnic Institute.

**6:30 p.m.—COPSS Committee on Careers Brochure**

Chairman: W. H. CLATWORTHY, State University of New York at Buffalo

**Tuesday, April 4, 1967**

**9:00 a.m.—11:00 a.m.—Stochastic Processes**

Chairman: W. L. SMITH, University of North Carolina

1. *Sample Sequences of Maxima*, J. PICKANDS, III, Virginia Polytechnic Institute.
2. *On Certain Basic Results Pertaining to Point Processes*, M. R. LEADBETTER, University of North Carolina.
3. *Some Results for a Queue with Related Arrival and Service Intervals*, B. W. CONNOLLY, Virginia Polytechnic Institute.
4. *Contributions to Central Limit Theory for Dependent Variables*, R. J. SERFLING, Research Triangle Institute.

**1:00 p.m.—2:45 p.m.—Inference**

Chairman: W. J. HALL, University of North Carolina

1. *Asymptotically Most Powerful Rank Order Test for Grouped Data*, P. K. SEN, University of North Carolina.
2. *Sequential Methods Related to the Two-armed Bandit Problem*, H. CHERNOFF, Stanford University.
3. *Operating Characteristics of Some Sequential Design Rules*, R. BOHRER, Research Triangle Institute.
4. *An Empirical Bayes Approach to Linear Regression*, R. G. KRUTCHKOFF, Virginia Polytechnic Institute.

**3:00 p.m.—5:00 p.m.—Experimental Design**

Chairman: A. C. COHEN, University of Georgia

1. *A Unified Approach for Constructing Non-Orthogonal Main Effect Plans in  $k^n$  Factorials*, B. L. RAKTOE, Colonia, Uruguay and W. T. FEDERER, Cornell University.
2. *A Generalized Procedure for Constructing Fractional Replicates*, U. B. PAIK and W. T. FEDERER, Cornell University.
3. *A Class of Nested PBIB Screening Designs*, K. HINKELMANN, Virginia Polytechnic Institute.
4. *Homoscedasticity in Linear Regression Analysis with Equally Spaced X's*, A. HEDAYAT and D. S. ROBSON, Cornell University.

Discussant: F. CLARK, University of Georgia

**Wednesday, April 5, 1967**

**9:00 a.m.—11:00 a.m.—Contributed Papers III**

Chairman: S. KULLBACK, George Washington University

1. *Some Integral Transforms of Characteristic Functions*, G. R. ANDERSEN, Bellcom, Inc. and T. KAWATA, The Catholic University of America.
2. *Remarks on Some Classes of Characteristic Functions*, T. KAWATA, The Catholic University of America.

3. *A Distribution Arising from Random Points on the Circumference of a Circle*, (Preliminary Report), N. F. LAUBSCHER and G. J. RUDOLPH, Pretoria, South Africa.
4. *Some Limit Theorems for Dependent 'Rare' Events*, R. M. MEYER, University of North Carolina.
5. *The Dominance of the Mean for Binary Choice*, M. HINICH, Columbia University.
6. *On the Use of OLUMV Estimators in Inference Robustness Studies of the Location Parameter of a Class of Symmetric Distributions*, G. C. TIAO, University of Wisconsin, and D. LUND, State University of Wisconsin.
7. *Testing for Uniformity of a Distribution on a Compact Topological Group*, R. J. BERAN, Johns Hopkins University (introduced by G. S. WATSON).
8. *On the Convergence of Discrimination Information*, S. KULLBACK, George Washington University.

**9:00 a.m.—11:00 a.m.—Multivariate Analysis (IMS, ENAR)**

Chairman: S. K. KATTI, Florida State University

1. *Some Methods of Multiple Comparison in  $T^2$  and MANOVA*, K. R. GABRIEL, University of North Carolina and Hebrew University.
2. *Selection Procedures Based on Multiple Variables*, J. ROY, Pennsylvania State University.
3. *A Monte Carlo Investigation of Certain Problems in the Application of Classification Procedures*, R. E. POGUE and A. JOHNSON, University of Minnesota.

**1:00 p.m.—2:45 p.m.—Contributed Papers IV**

Chairman: R. L. ANDERSON, University of Georgia

1. *A Class of Tests Based on U Statistics for the Several Sample Problem*, J. V. DESHPANDÉ, University of North Carolina.
2. *Tests Based on a Symmetrical Optimality Criterion*, O. KRAFFT, University of North Carolina.
3. *On a k-Sample Model of Conover*, P. V. RAO, University of Florida.
4. *Maximum Likelihood Rankings from Paired Comparisons When Ties are Allowed*, (Preliminary Report), J. SINGH and W. A. THOMPSON, JR. The Florida State University.
5. *A New Class of Conditions for the Existence of Partially Balanced Arrays, Including BIBD's and Orthogonal Arrays*, (Preliminary Report), J. N. SRIVASTAVA, Colorado State University.
6. *On the Minimum Number of Assemblies Required to Construct Some Partially Balanced Arrays With Two Symbols*, D. V. CHOPRA, Southern Colorado State College.
7. *Partial Diallel Cross Designs*, (Preliminary Report), K. R. SHAH, Michigan State University.

**Contributed Papers by Title**

1. *Some Extensions of Somerville's Procedure for Ranking Means of Normal Populations*, W. R. FAIRWEATHER, Cornell University.
2. *Simultaneous Tests for Multiple Comparisons of Polynomial Growth Curves When Errors are Autocorrelated*, P. R. KRISHNAIAH, Wright-Patterson Air Force Base.
3. *On the Asymptotic Normality of One Sample Chernoff-Savage Test Statistics*, M. L. PURI and P. K. SEN, New York University and University of North Carolina.
4. *Tables for the Moments of Gamma Order Statistics*, M. C. BREITER and P. R. KRISHNAIAH, Wright-Patterson Air Force Base.
5. *Structural Analysis for the Multivariate Regression Model*, M. S. HAQ, University of British Columbia.

6. *The Extended Negative Hypergeometric Distribution*, (Preliminary Report), P. R. MILCH, Naval Postgraduate School.
7. *An Iterative Solution for the Simple Stochastic Epidemic*, N. C. SEVERO, State University of New York at Buffalo.

### PUBLICATIONS RECEIVED

- BARTLETT, M. S. (1967). *An Introduction to Stochastic Processes*. Cambridge University Press. xvi + 362 pp. \$9.50.
- DROOYAN, J. and HADEL, W. (1967). *Trigonometry*. The Macmillan Company. x + 358 pp. \$5.50.
- FISK, P. R. (1967). *Stochastically Dependent Equations*. Griffin's Statistical Monograph No. 21. Hafner Publishing Company. vii + 181 pp. \$6.40.
- GELFAND, I. M., GLAGOLEVA, and KIRILLOV, A. A. (1967). *The Methods of Coordinates*. The M.I.T. Press. viii + 69 pp. \$1.50.
- GOODMAN, A. W. (1967). *Modern Calculus with Analytic Geometry*. Volume 1. The Macmillan Company. xxiii + 808 pp. \$10.95.
- HAIGHT, F. A. (1967). *Handbook of the Poisson Distribution*. John Wiley & Sons. xi + 168 pp. \$9.50.
- HOPE, K. (1967). *Elementary Statistics*. Pergamon Press. xii + 101 pp. \$4.00.
- HYATT, H. R. and CARICO, C. C. (1967). *Modern Plane Geometry for College Students*. The Macmillan Company. xi + 452 pp. \$7.95.
- LEVENSON, MORRIS E. (1967). *Maxima and Minima*. The Macmillan Company. xiv + 146 pp. \$2.95.
- MACLANE, SAUNDERS and BIRKOFF, GARRETT. (1967). *Algebra*. The Macmillan Company. xix + 598 pp. \$11.95.
- NEUMANN, HANNA. (1967). *Varieties of Groups*. Springer-Verlag New York Inc. xi + 192 pp. \$11.50.
- RAHMAN, N. A. (1967). *Exercises in Probability and Statistics*. Hafner Publishing Company. xi + 307 pp. \$10.50.
- SIMON, ARTHUR B. (1967). *First Year Calculus*. The Macmillan Company. xiv + 465 pp. \$9.95.
- SMITH, R. E. (1967). *The Bases of Fortran*. Control Data Institute. vii + 253 pp. \$3.50.
- ZARING, —. (1967). *An Introduction to Analysis*. The Macmillan Company. xi + 364 pp. \$9.95.