#### **NEWS AND NOTICES**

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

#### Personal Items

Zakkula Govinarajulu, Associate Professor of Mathematics at Case Western Reserve University, has accepted the position of Professor of Statistics at the University of Kentucky effective January 15, 1968.

Jutus F. Seely has been awarded the George W. Snedecor Award for 1968 at Iowa State University which is given annually to the outstanding candidate for the Ph.D. degree in statistics at Iowa State.

# New Members

- Anderson, Dwane, E., M.P.H., (University of North Carolina); Graduate Student, Southern Methodist University.
- Ballard, Robert John, B.S., (Central Michigan University); Graduate Student, Department of Statistics, and Probability, Michigan State University.
- Basawa, Ishwarasa Vithobasa, M.A., (Karnatak University); Assistant Lecturer, Department of Statistics, Sheffield University.
- Basu, Adhir, K., M.S., (Calcutta University); Graduate Student, Department of Statistics, Purdue University.
- Chang, Potter Chien-tien, M.S., (University of Minnesota); Graduate Student, Division of Biometry, School of Public Health, University of Minnesota.
- Consul, Prem Chandra, Ph.D., (Agra University); Associate Professor, University of Calgary.
- Danielsson, Stig, Student, Department of Mathematics and Statistics, University of Umeä.
- Dale, Andrew I., M.Sc., (University of Capetown); Lecturer in Statistics, University of Natal.
- Dietz, Klaus, Dr. Rer. Nat., (Heidelberg University); Lecturer, Department of Probability and Statistics, University of Sheffield.
- Dinsmore, Bruce M., B.S., (McNeese State College); Graduate Student, Virginia Polytechnic Institute.
- Downs, Thomas D., Ph.D., (University of Michigan); Assistant Professor, Department of Biometry, School of Medicine, Case Western Reserve University
- Dudley, Richard M., Ph.D., (Princeton University); Associate Professor, Massachusetts Institute of Technology.
- Fabian, Vaclav, RNDr, (Charles University); Research Mathematician, Institute for Information Theory and Automation, Czechoslovak Academy for Sciences.
- Fenger, Kirsten, Cand. Stat., (University of Copenhagen); Research Assistant, Institute of Medical Genetics, University of Copenhagen.

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- Krossner, William J., Ph.D., (Harvard University); Assistant Professor, Cornell University.
- Lee, Guan Parr, B.S., (University of Singapore).
- Lee, Yoong-Sin, M.S., (University of Toronto); Graduate Student, University of Toronto.
- Levy, Theodore E., B.A., (Michigan State University); Graduate Student, Department of Statistics, Michigan State University.
- Meeden, Glen D., M.A., (University of Illinois); Graduate Student, Department of Mathematics, University of Illinois.
- Moerdyk, Paul A., B.S., (Calvin College); Graduate Student, Department of Statistics and Probability, Michigan State University.
- Nagambal, Pazhedath N., M.S., (Kerala University); Graduate Student, Department of Mathematics, University of Windsor.
- Nelson, Judith Zeh, B.S., (University of Washington); Assistant Mathematician, Applied Physics Laboratory, University of Washington.
- Nelson, Paul C., B.S., (University of Arkansas); Project Engineer, NASA-G. C. Marshall Space Flight Center, Redstone Arsenal, Alabama.
- Nelson, William C., Ph.D., (Virginia Polytechnic Institute); Research Mathematical Statistician, Biometry Unit, National Center for Air Pollution Control, U. S. Public Health Service, Cincinnati.
- Paranjape, Suresh R., M.S., (Purdue University); Graduate Student, Department of Statistics, Purdue University.
- Parish, Robert G., B.S., (London University); Graduate Student, North Carolina State University.
- Parker, Roger A., B.S., (University of Washington); Graduate Student, Department of Urban Planning, University of Washington.
- Powers, William A., B.S., (University of Richmond); Graduate Student, Department of Statistics, University of Connecticut.
- Priddy, Lawrence Harwood, B.S., (Bucknell University); Graduate Student, Bucknell University.
- Pyne, David A., B.A., (St. Benedict's College); Graduate Student, Iowa State University.
- Rafter, John A., B.S., (University of Michigan); Graduate Student, Department of Statistics and Probability, Michigan State University.
- Randles, Ronald H., M.S., (Florida State University); Graduate Student, Department of Statistics, Florida State University.
- Riskaala, Magdy G., M.S., (Purdue University); Graduate Student, Department of Statistics, Purdue University.
- Roy, Lawrence K., M.S., (Queen's University); Graduate Student, Queen's University, Kingston.
- Scott, Malcolm Stuart, Jr., S.M., (University of Chicago); Statistician/Captain, USA Personnel Management Development, Department of Army, Washington, D. C.

- Soults, Donald J., Ph.D., (Iowa State University); Research Associate, Iowa State University.
- Strand, Otto N., M.A., (University of California, Los Angeles); Mathematician, Essa, Department of Commerce, Boulder, Colorado.
- Strawderman, William E., M.S., (Rutgers-The State University); Instructor in Applied Mathematical Statistics, Rutgers-The State University.
- Subba Rao, Tata, Ph.D., (Gauhati University); Assistant Lecturer, Department of Mathematics, University of Manchester.
- Sun, Evan H. W., M.S., (North Carolina State University); Graduate Student, North Carolina State University.
- Swales, Lvita Booth, M.S., (University of California, Berkeley); Graduate Student, Department of Biostatistics, University of California, Los Angeles.
- Swanson, Richard W., M.S., (Iowa State University); Senior Scientist, Booz-Allen Applied Research Inc., Los Angeles.
- **Thyregod, Poul,** Cand. Stat., (University of Copenhagen); Scientific Assistant, University of Copenhagen.
- Townsend, Edwin G., M.S., (West Virginia University); Graduate Student, Cornell University.
- Trivedi, Surendra Jayantilal, M.S., (Baroda University); Graduate Student, Department of Statistics, University of Georgia.
- de Waal, Daniel J., M.S., (University of the Orange Free State); Lecturer, Department of Statistics, University of Orange Free State.
- Walker, Joseph J., B.A., (Pomona College); Graduate Student, Department of Statistics, University of North Carolina.
- Wallace, Norval D., Ph.D., (St. Louis University); Associate Professor of Mathematics and Computer Science, University of Missouri at Rolla.
- Weber, William R., M.S., (Southern Methodist University); Project Statistician, Geotech, A Teledyne Company, Garland, Texas.
- Wegman, Edward J., M.S., (University of Iowa); Graduate Student, Department of Statistics, University of Iowa.
- West, Charles A., A.B., (University of California, Berkeley); Graduate Student, Department of Statistics and Probability, Michigan State University.
- Withers, Christopher S., M.S., (Auckland University); Graduate Student, Department of Statistics, Stanford University.
- Yu, Chin S., B.S., (University of Nebraska); Graduate Student, Department of Mathematics, University of Maryland.

#### TWO NEW AMS TRANSLATION JOURNALS

The American Mathematical Society has established two new translation journals: Mathematics of the USSR—Sbornik and Mathematics of the USSR—Izvestija. Sbornik is a continuing, cover-to-cover translation into English of Matematičeskiĭ Sbornik (New Series), published monthly by the Moscow Mathematical Society and the Academy of Sciences of the USSR. The translation will be published monthly.

Izvestija is a continuing, cover-to-cover translation of Izvestija Matematičeskaja Serija. It is a bimonthly publication of the Academy of Sciences of the USSR, and the translation will also be published bimonthly.

Izvestija and Sbornik both present contemporary research results in pure mathematics of some of the best mathematicians in the Soviet Union. The AMS has previously translated a significant portion of these journals in Selected Translations Series I and II and in Selected Translations in Mathematical Statistics and Probability; it now feels that the importance of these journals justifies the complete, cover-to-cover translation of each.

The first issue of Izvestija will be available by April 1, 1968, and the first issue of Sbornik will be published shortly thereafter. The AMS is now welcoming subscription orders.

#### APPLIED STATISTICS ALGORITHM SECTION

The Royal Statistical Society in co-operation with the Science Research Council's Working Party on Statistical Computing will publish in Applied Statistics algorithms relevant to statistics. Algorithms written in Algol-60, ASA Standard Fortran, or PL/1 accompanied by an external specification may be sent to:

The Editor, Applied Statistics, Royal Statistical Society, 21, Bentinck Street, London W.1., England.

A policy statement describing the editorial policy appears in *Applied Statistics* 17, No. 1, (1968). A support paper describing the expected contents of the external specification, and making recommendations for the layout of algorithms and for programming strategy will appear in the following issue.

# REPORT OF THE EAST LANSING, MICHIGAN MEETING OF THE INSTITUTE OF MATHEMATICAL STATISTICS

The one-hundred-seventeenth meeting of the Institute of Mathematical Statistics, Central Regional Meeting, was held at Michigan State University, East Lansing, Michigan, on March 18–20, 1968. A total of 147 persons registered for the meetings. Of this number, 112 were members.

#### **PROGRAM**

Monday, March 18, 1968

## 10:30 a.m.-12:00 noon-Invited Papers I

Chairman: J. H. Stapleton, Michigan State University

1. On Some Recent Results in Empirical Bayes Theory, J. VAN RYZIN, University of Wisconsin at Milwaukee.

2. A Survey of Some Recent Work in Branching Processess, Peter Ney, University of Wisconsin.

## 1:30 p.m.-2:45 p.m.-Contributed Papers I

Chairman: Dennis C. Gilliland, Michigan State University

Regularity Conditions Leading to Optimal Asymptotic Regression Estimators, A. LAWRENCE GOULD, Research Triangle Institute.

Inadmissibility of the Best Invariant Test when the Moment is Infinite under One of the Hypotheses, Martin Fox, University of Wisconsin, and S. K. Perng, Michigan State University.

Asymptotically Nearly Efficient Estimators of Multivariate Location Parameters, David S. Moore, Purdue University.

The Behavior of Some Robust Estimators on Dependent Data, Joseph L. Gastwirth, The Johns Hopkins University, and Herman Rubin, Purdue University.

Finite Splittings of the States of a Stationary Process to Produce a Markov Process, Martin Fox, Mathematics Research Center, U. S. Army, and Herman Rubin, Purdue University.

## 3:00 p.m.-5:00 p.m.-Invited Papers II

Chairman: Bruce M. Hill, University of Michigan

- Some Remarks on Scheffe's Solution to the Behrens-Fisher Problem, Morris
  L. Eaton, University of Chicago.
- 2. Properties of the Compound Multinomial Distribution Useful in a Bayesian Analysis of Categorical Data from Finite Populations, A. Bruce Hoadley, Bell Telephone Laboratories.

# Tuesday, March 19, 1968

# 9:00-9:45 a.m.—Contributed Papers II

Chairman: James Stapleton, Michigan State University

Cross Classification Models with Random Effects, Leone Y. Low, Wright State University.

On Blocking 2<sup>n</sup> Factorials, DENNIS C. GILLILAND, Michigan State University.

Cyclic Designs with the Folded Cubic Association Scheme, Peter W. M. John, The University of Texas.

## 10:00 a.m.-12:00 noon-Invited Papers III

Chairman: J. Van Ryzin, University of Wisconsin at Milwaukee

1. On Probability Paradoxes in Statistics, Colin R. Blyth, University of Illinois.

- 2. A General Theory of Subjective Probability and Expected Utilities, Peter C. Fishburn, Research Analysis Corporation.
- 3. On Exchangeability, Coherence, and Order Statistics, Bruce M. Hill, University of Michigan.

## 1:30 p.m.-2:45 p.m.-Contributed Papers III

Chairman: Peter W. H. John, University of Texas

- Distribution-Free Tests for Multivariate Independence, Symmetry and k-Sample Problems, C. B. Bell and Paul Smith, Case Western Reserve University.
- Certain Optimal Nonparametric Test for Slippage, Z. Govindarajulu and H. Smith Haller, Case Western Reserve University.
- c-Sample Tests of Homogeneity Against Ordered Alternatives, Z. Govinda-Rajulu, and H. Smith Haller, Case Western Reserve University.
- On the Monotonicity of  $E_p(S_t/t)$ , Y. S. Chow and W. J. Studden, Purdue University.
- A Useful Device for Continuity Theorems, Herman Rubin, Purdue University.

#### **3:00** p.m.-**5:00** p.m.—*Invited Papers IV*

Chairman: Lajos Takacs, Case Western Reserve University

- 1. A Nonparametric Analysis of Two-Way Layouts with Interactions, I, JAYANT V. DESHPANDE, Case Western Reserve University.
- 2. A Nonparametric Analysis of Two-Way Layouts with Interactions, II, Charles B. Bell, Case Western Reserve University.
- 3. Waiting Time Processes in Queueing Systems with Some Mixed Discipline, U. Narayan Bhat, Case Western Reserve University.

# Wednesday, March 20, 1968

### 9:00 a.m.-10:00 a.m. -Contributed Papers IV

Chairman: Z. Govindarajulu, Case Western Reserve University.

- On the Computation of Normal Probabilities and Percentiles, John S. White, General Motors Corporation.
- Distribution of Linear Combination of Order Statistics from the Rectangular Population, M. M. Ali, University of Western Ontario.
- Distribution of Non-Central Positive Definite Quadratic Functions from a Multivariate Normal Distribution, B. K. Shah, Yale University.
- On the Distribution of Rank Orders from Several Samples and Asymptotically Locally Most Powerful Rank Order Test Statistics, Chia Kuei Tsao, Wayne State University.
- Probability Limits for Weibull and Certain Other Order Statistics, SATYA D. Dubey, New York University.

### 10:15 a.m.-11:45 a.m.-Invited Papers V

Chairman: Tim Robertson, University of Iowa

- 1. A Survey of Probability Theory, I, J. L. Doob, University of Illinois.
- 2. A Survey of Probability Theory, II, D. L. Burkholder, University of Illinois.

# 1:30 p.m.-3:45 p.m.-Invited Papers VI

Chairman: S. S. Gupta, Purdue University

- 1. A Survey of Statistics, I, H. Robbins, University of Michigan.
- 2. A Survey of Statistics, II, H. Rubin, Purdue University.
- 3. A Survey of Statistics, III. R. R. BAHADUR, University of Chicago.

#### PUBLICATIONS RECEIVED

- AIGNER, DENNIS J. (1968). Principles of Statistical Decision Making. Macmillan Company, New York. xii + 145 pp. \$6.95.
- Anderson, T. W. (editor) (1967). S. S. Wilks: Collected Papers: Contributions to Mathematical Statistics. John Wiley and Sons, New York. xxxii + 693 pp. \$12.50.
- Bartholomew, D. J. (1968). Stochastic Models for Scoial Processes. John Wiley and Sons, New York. xii × 275 pp. \$9.50.
- Bulmer, M. G. (1967); *Principles of Statistics*. M. I. T. Press, Cambridge. vii + 352 pp. \$7.50.
- Feller, William (1968). An Introduction to Probability Theory and Its Applications, Vol. 1 (3rd edition). John Wiley and Sons, New York. viii + 509 pp. \$10.95.
- Feshchenko, S. F., Shkil, N. I. and Nikolenko, L. D. (1968). Asymptotic Methods in the Theory of Linear Differential Equations. American Elsevier Publishing Co., New York. xvi + 270 pp. \$15.00.
- Gray, J. R. (1967). *Probability*. John Wiley and Sons, New York. viii + 267 pp. \$3.95.
- Krishnaiah, P. R. (editor) (1967). *Multivariate Analysis*. Academic Press, New York. xix + 592 pp. \$19.50.
- Kurtz, Albert K. and Egerton, Harold A. (1967). Statistical Dictionary (Facsimile of the 1939 Edition). Hafner Publishing Company, New York. xiii + 191 pp. \$7.50.
- LeCam, Lucian and Neyman, Jerzy (editors) (1967). Proceedings of the Fifth Berkeley Symposium on Mathematical Statistics and Probability. Vol. I: Theory of Statistics, xvii + 666 PP. \$20.00; Vol. II: Part I: Probability Theory, xvi + 447 pp. \$14.00; Vol. II, Part II: Probability Theory, xvi + 483 pp. \$15.00; Vol. III: Physical Sciences and Engineering, xvi + 324 pp. \$10.00; Vol. IV: Biology and Problems of Health, xix + 934 pp. \$28.50; Vol. V: Weather Modification Experiments, xix + 451 pp. \$14.00. University of California Press.