

REPORT ON THE BERKELEY MEETING OF THE INSTITUTE

The Thirty-fourth Meeting and the Third Regional West Coast Meeting of the Institute of Mathematical Statistics was held on the Berkeley Campus of the University of California June 22nd through June 24th, 1948, in conjunction with the Twenty-ninth Annual Meeting of the Pacific Division of the American Association for the Advancement of Science. During the meeting 115 persons registered, including the following members of the Institute:

G. A. Baker, Blair M. Bennett, Carl A. Bennett, Z. Wm. Birnbaum, David Blackwell, Albert H. Bowker, George W. Brown, A. George Carlton, Douglas G. Chapman, Andrew G. Clark, Edwin L. Crow, Dorothy Cruden, Harold Davis, R. C. Davis, W. J. Dixon, Robert Dorfman, George Eldredge, Lillian Elveback, Mary Elveback, Benjamin Epstein, M. W. Eudey, Evelyn Fix, Merrill M. Flood, H. H. Germond, Meyer A. Girshick, Eugene L. Grant, John Gurland, T. E. Harris, J. L. Hodges, Jr., Paul G. Hoel, John M. Howell, Harry M. Hughes, Leo Katz, H. S. Konijn, T. C. Koopmans, George W. Kuznets, E. L. Lehmann, Richard F. Link, A. M. Mood, Stanley W. Nash, J. Neyman, Stefan Peters, G. Baley Price, Kathryn B. Rolfe, Leonard J. Savage, Henry Scheffé, Howard L. Schug, Elizabeth L. Scott, Esther Seiden, Milton Sobel, Zenon Szatrowski, John W. Tukey, J. R. Vatsndal, A. Wald, John E. Walsh, Holbrook Working, Zivia S. Wurtele.

The Tuesday morning session was devoted to a symposium on *Mathematical Theory of Games* with Professor G. C. Evans of the University of California, Berkeley, as chairman. Addresses were:

1. *Survey of von Neumann's mathematical theory of games.* J. C. C. McKinsey, Project Rand.
2. *Recent developments in the mathematical theory of games.* Olaf Helmer, Project Rand.
3. *Applications of theory of games to statistics.* Abraham Wald, Columbia University.
4. *On continuous games.* Henri F. Bohnenblust, California Institute of Technology.
5. *Discussion.* Edward W. Barankin, University of California, Berkeley.

The attendance was approximately 130.

The Tuesday afternoon session was under the chairmanship of Professor Henri F. Bohnenblust of the California Institute of Technology. The invited address, *Complete Classes of Statistical Decision Functions*, by Professor Abraham Wald was followed by tea in Senior Women's Hall and then the following contributed papers:

1. *Identification as a problem of inference.* T. C. Koopmans, Cowles Commission for Research in Economics.
Discussion: Olav Reiersøl, University of Oslo.
2. *Estimation of parameters for truncated multinormal distributions.* Z. W. Birnbaum, E. Paulson and F. C. Andrews, University of Washington.
3. *A test of the hypothesis that a sample of three came from the same normal distribution.* Carl A. Bennett, General Electric Company.
4. *A Note on the application of the abbreviated Doolittle solution to nonorthogonal analysis of variance and covariance.* (By title.) Carl A. Bennett, General Electric Company.

The attendance was between 100 and 150 during the afternoon.

The Wednesday morning session was devoted to a symposium on *Design of Experiments with Particular Reference to Agricultural Trials*. Dean A. R. Davis of the University of California, Berkeley, presided briefly and then Professor Abraham Wald took over the duties of chairman. The papers were:

1. *Recent advances in experimental design*. R. C. Bose, University of Calcutta.
2. *Yield trials with backcrossed derived lines of wheat*. G. A. Baker and F. N. Briggs, University of California at Davis.
3. *Selecting subset which includes the largest of a number of means*. Charles Stein, University of California, Berkeley.
4. *Discussion*. A. G. Clark, Colorado State College; S. W. Nash, University of California, Berkeley; J. R. Vatnsdal, State College of Washington.
5. *The effect of inbreeding on height at withers in a herd of Jersey cattle*. W. C. Rollins, S. W. Mead and W. M. Regan, University of California at Davis.

Attendance was about 100.

The afternoon session, under the chairmanship of Professor George Pólya of Stanford University, began with an invited address by Professor Michel Loève, University of California, Berkeley, on *Random Functions and Related Problems*. This was followed by the contributed papers:

1. *An example of a singular continuous distribution*. (By title.) Henry Scheffé, University of California at Los Angeles.
2. *On the theory of some nonparametric hypotheses*. E. L. Lehmann and Charles Stein, University of California, Berkeley.
3. *Compound randomization in the binary system*. John E. Walsh, Project Rand.
4. *A multiple decision problem arising in the analysis of variance*. Edward Paulson, University of Washington.
5. *Recurrence formulae for the moments and seminvariants of the joint distribution of the sample mean and variance*. Olav Reiersøl, University of Oslo.
6. *Identification problem in factor analysis*. (By title.) Olav Reiersøl, University of Oslo.
7. *On distinct hypotheses*. Mrs. Agnes Berger, Columbia University.

The attendance was approximately 100.

A symposium on *Sampling for Industrial Use* occupied the Thursday morning session. Professor Z. W. Birnbaum of the University of Washington presided.

1. *Sampling plans for continuous production*. M. A. Girshick, Project Rand.
2. *Sampling plans with continuous variables for acceptance inspection*. A. L. Bowker, Stanford University.
3. *Place of statistical sampling in the education of engineers*. E. L. Grant, Stanford University.
4. *Discussion*. Henry Scheffé, University of California at Los Angeles; Charles Stein, University of California, Berkeley; Holbrook Working, Stanford University.

The attendance was approximately 100.

The first part of the afternoon session, presided over by Professor W. J. Dixon, University of Oregon, was devoted to contributed papers:

1. *Statistical problems of medical diagnosis*. Jerzy Neyman, University of California, Berkeley.
- Discussion*: L. J. Savage, University of Chicago.

2. *Power of certain tests relating to medical diagnosis.* C. L. Chiang and J. L. Hodges, University of California, Berkeley.
3. *On best asymptotically normal estimates.* Edward W. Barankin and John Gurland, University of California, Berkeley.
4. *Iterative treatment of continuous birth processes.* T. E. Harris, Project Rand.
5. *Estimation of means on the basis of preliminary tests of significance.* Blair M. Bennett, University of California, Berkeley. (By title.)

The attendance was about 90.

The second part of the afternoon session was the Business Meeting. Professor Abraham Wald, President of the Institute, presided. It was recommended that two meetings a year be held on the West Coast, one in June in the San Francisco Bay Area alternating between Berkeley and Stanford and the other during the winter alternating between the North and Los Angeles. The next West Coast meeting will be held during the Thanksgiving recess at Seattle.