

REPORT OF THE POUGHKEEPSIE MEETING OF THE INSTITUTE

The Fifth Summer Meeting of the Institute of Mathematical Statistics was held at Vassar College, Tuesday and Wednesday, September 8-9, 1942, in conjunction with the meetings of the American Mathematical Society and the Mathematical Association of America. The following fifty-eight members of the Institute attended the meeting:

K. J. Arnold, L. A. Aroian, K. J. Arrow, Walter Bartky, Felix Bernstein, C. I. Bliss, A. H. Bowker, J. H. Bushey, Belle Calderon, B. H. Camp, A. C. Cohen, Jr., A. H. Copeland, C. C. Craig, J. H. Curtiss, W. E. Deming, J. L. Doob, M. L. Elveback, Willy Feller, M. M. Flood, R. M. Foster, H. A. Freeman, T. N. E. Greville, C. C. Grove, E. J. Gumbel, Edward Helly, G. M. Hopper, Harold Hotelling, Dunham Jackson, R. E. Jolliffe, Irving Kaplansky, Karl Karsten, B. F. Kimball, Howard Levene, Eugene Lukacs, H. B. Mann, E. B. Mode, E. C. Molina, F. C. Mosteller, C. R. Mummery, M. L. Norden, E. G. Olds, Oystein Ore, Edward Paulson, Selby Robinson, F. E. Satterthwaite, Henry Scheffé, L. E. Simon, Mortimer Spiegelman, Arthur Stein, J. R. Tomlinson, A. W. Tucker, J. W. Tukey, D. F. Votaw, Jr., Abraham Wald, S. S. Wilks, E. W. Wilson, Jacob Wolfowitz, L. C. Young.

The opening session, on Tuesday afternoon, was devoted to contributed papers on *Probability and Statistics* and was held jointly with the American Mathematical Society. The Chairman was Professor Cecil C. Craig, University of Michigan, and the following papers were presented:

1. *On the Theory of Testing Composite Hypotheses With One Constraint.*
Henry Scheffé, Princeton University.
2. *On the Consistency of a Class of Non-parametric Statistics.*
Jacob Wolfowitz, Staten Island, N. Y.
3. *Graphical Controls Based on Serial Numbers.*
E. J. Gumbel, New School for Social Research.
4. *Significance Tests for Multivariate Distributions.*
D. S. Villars, United States Rubber Company. (Introduced by E. G. Olds.)
5. *On the Choice of the Number of Class Intervals in the Application of the Chi-square Test.*
H. B. Mann and Abraham Wald, Columbia University.
6. *Generalized Poisson Distribution.*
F. E. Satterthwaite, Aetna Life Insurance Company.
7. *The Relationship of Fisher's Z Distribution to Student's t Distribution.*
Leo A. Aroian, Hunter College.
8. *On a Statistical Problem Arising in the Classification of an Individual In One of Two Groups.*
Abraham Wald, Columbia University.
9. *Modern Statistical Methods in Penology.*
Saly R. R. Struik, Radcliffe College.
Miriam van Waters, Framingham, Mass.
10. *Regularity of Label-sequences Under Configuration Transformations.*
T. N. E. Greville, Bureau of the Census.

By Title:

On the Ratio of the Variances of Two Normal Populations.

Henry Scheffé, Princeton University.

Abstracts of these papers follow this report.

On Wednesday morning Professor Harold Hotelling, Columbia University, acted as Chairman of a session on *Stochastic Processes*. The following papers were presented:

1. *Persistence and Recurrence*.
A. H. Copeland, University of Michigan.
2. *Definitions and Some Practical Applications*.
Willy Feller, Brown University.
3. *General Theory and Applications to Physics*.
J. L. Doob, University of Illinois.

The session on Wednesday afternoon was held jointly with the American Mathematical Society. Lt. Col. Leslie E. Simon, U. S. A., served as Chairman, and the following papers on *The Applicability of Mathematical Statistics to War Efforts* were presented:

1. *Statistical Prediction, With Special Reference to the Problem of Tolerance Limits*.
S. S. Wilks, Princeton University.
Discussant: J. H. Curtiss, Cornell University.
2. *On the Nature of Mathematical Statistics in Quality Control*.
W. Edwards Deming, Bureau of the Census.
Discussant: Walter Bartky, University of Chicago.

A meeting of the Board of Directors was held on Tuesday evening. Following the joint dinner on Wednesday evening, a concert was given in Skinner Hall by members of the music department of Vassar College.

EDWIN G. OLDS,
Secretary