

## REPORT ON THE ITHACA MEETING OF THE INSTITUTE

The Ninth Summer Meeting of the Institute of Mathematical Statistics was held at Cornell University, Ithaca, New York, on Thursday, August 21, and Saturday, August 23, 1946. The meeting was held in conjunction with the summer meetings of the American Mathematical Society and the Mathematical Association of America. The following 71 members of the Institute attended the meeting:

P. L. Alger, C. B. Allendoerfer, T. W. Anderson, Jr., J. L. Barnes, E. E. Blanche, Paul Boschán, A. H. Bowker, A. E. Brandt, R. S. Burington, W. G. Cochran, E. P. Coleman, H. B. Curry, J. H. Curtiss, J. L. Doob, J. Dutka, P. S. Dwyer, B. Epstein, Will Feller, C. D. Ferris, R. M. Foster, J. E. Freund, M. A. Girschick, A. A. Goodman, Louis Guttman, W. W. Gutzman, P. R. Halmos, T. E. Harris, Bertha I. Hart, E. H. C. Hildebrandt, P. G. Hoel, R. H. Hoskins, Harold Hotelling, W. W. Jacobs, T. J. Jaramillo, Evan Johnson, Jr., H. L. Jones, Mark Kac, Irving Kaplansky, Leo Kart, Tjalling Koopmans, C. F. Kossack, M. M. Lavin, Walter Leighton, Jr., Howard Levene, M. S. Macphail, J. W. Mauchly, P. J. McCarthy, E. C. Molina, Margaret E. Moore, J. E. Morton, L. F. Nanni, P. M. Neurath, E. G. Olds, G. B. Price, C. J. Rees, Selby Robinson, Herman Rubin, P. J. Rulon, Arthur Sard, F. E. Satterthwaite, I. E. Segal, G. R. Seth, Andrew Sobczyk, Herbert Solomon, C. M. Stein, F. F. Stephan, A. P. Stergion, A. W. Tucker, J. W. Tukey, J. L. Ullman, Abraham Wald, S. S. Wilks.

The first session, a joint session with the American Mathematical Society, was held on Thursday morning, and was devoted to contributed papers. Professor W. G. Cochran, President of the Institute, presided. The following seven papers were presented:

1. *A Test of Randomness in Two Dimensions.*  
Mr. Howard Levene, Columbia University.
2. *Asymptotic Distribution of Moments from a System of Linear Stochastic Difference Equations.*  
Mr. Herman Rubin, Cowles Commission for Research in Economics.
3. *Conditional Expectation and Unbiased Sequential Estimation.*  
Professor David Blackwell, Howard University.
4. *A Discussion of the Ehrenfest Model.* Preliminary report.  
Professor Mark Kac, Cornell University.
5. *Sampling from Contaminated Distributions.* Preliminary report.  
Professor John W. Tukey, Princeton University.
6. *On the Class of Functions Defined by the Difference Equation  $(x + 1) f(x + 1) = (a + bx) f(x)$ .*  
Dr. Leo Katz, Wayne University.
7. *Retention of Decimal Places in Matrix Calculations.*  
Dr. Franklin E. Satterthwaite, Aetna Life Insurance Company.

The following four papers were presented by title:

8. *The Efficiency of the Mean Moving Range.*  
Professor Paul G. Hoel, University of California at Los Angeles.
9. *Some Basic Theorems for Developing Tests of Fit for the Case of the Non-Parametric Probability Distribution Function.*  
Mr. Bradford F. Kimball, N. Y. State Department of Public Service, New York City.

10. *Confidence Limits for the Fraction of a Normal Population Which Lies Between Two Given Limits.*  
Professor Jacob Wolfowitz, Columbia University.
11. *The Consolidated Doolittle Technique.*  
Dr. Paul Boschan, The Econometric Institute, Inc.

Abstracts of all these papers appear elsewhere in this issue of the *Annals*.

At two o'clock on Thursday afternoon there was a joint session with the American Mathematical Society which featured the invited address of Professor J. L. Doob of the University of Illinois on *Probability in Function Space*. This address was followed by a business meeting of the Institute which featured reports by the President, the Secretary-Treasurer, the Editor, and Professor Feller, who spoke for the recently created committee on the distribution of the *Annals* in the war areas.

On Thursday evening there was a joint dinner with the American Mathematical Society and the Mathematical Association of America.

The meeting closed with a session on Friday morning devoted to the topic, *Multivariate Analysis for Non-Experimental Data*. Professor Will Feller, of Cornell University, presided. Professor T. Koopmans, of the Cowles Commission for Research in Economics, presented a paper entitled *Statistical Inference in Dynamic Economic Models*. Dr. T. W. Anderson, Jr. presented a paper written by himself and Mr. Herman Rubin entitled *Estimation of Structural Equations through Linear Transformation of Regression Coefficients*. The meeting concluded with a discussion of these papers.

P. S. DWYER,  
*Secretary.*