

## THE JUNE MEETING IN BERKELEY

The three hundred fourteenth meeting of the Society was held at the University of California, Wednesday, June 20, 1934. The meeting was called to order at 9:30 and was presided over at different times by Professors E. R. Hedrick and Dunham Jackson.

The attendance included the following forty-four members:

A. B. Andrews, B. A. Bernstein, John Biggerstaff, H. F. Blichfeldt, C. E. Corbin, P. H. Daus, C. H. Dix, A. L. Foster, Raymond Garver, E. C. Goldsworthy, F. L. Griffin, Hillel Halperin, O. G. Harrold, M. A. Heaslet, E. R. Hedrick, Harold Hotelling, C. A. Hutchinson, Dunham Jackson, D. H. Lehmer, D. N. Lehmer, C. F. Luther, L. H. McFarlan, W. A. Manning, R. G. Mason, E. L. Mickelson, W. E. Milne, C. B. Morrey, F. R. Morris, F. W. Owens, H. B. Owens, Gordon Pall, T. A. Pierce, T. M. Putnam, E. B. Roessler, Pauline Sperry, L. H. Swinford, J. V. Uspensky, Morgan Ward, W. M. Whyburn, A. R. Williams, E. B. Wilson, B. C. Wong, E. R. Worthington, B. F. Yanney.

Luncheon for members and their guests was served at the Faculty Club of the University.

In the afternoon a joint meeting was held with Section A and Section K of the American Association for the Advancement of Science, and the Econometric Society. The following program of invited addresses was presented, Professor Hedrick presiding:

*Boole's challenge problem*, by Professor E. B. Wilson.

*Individual demand functions with a limited budget*, by Professor Harold Hotelling.

*Mathematical principles in the theory of small samples*, by Professor Dunham Jackson.

*A mathematical theory of production stages in economics*, by Mr. J. M. Thompson.

The titles of papers read at the morning session follow. Those whose abstract numbers are followed by the letter *t* were read by title. Mr. Elconin and Mr. Taylor were introduced by Professor Michal, Sister Mary Cleophas Garvin by Dr. Regan, and Mr. Hittell by Professor Flanders.

1. *On the order invariants of integral quadratic forms*, by Dr. Gordon Pall. (Abstract No. 40-3-190.)

2. *Further properties of ternary continued fractions* (preliminary report), by Dr. Ruth G. Mason. (Abstract No. 40-5-206.)
3. *Mechanical invariants of the sweeping-out process*, by Dr. C. H. Dix. (Abstract No. 40-5-211.)
4. *A necessary condition for the operability of systems of synchronous alternators*, by Dr. W. H. Ingram. (Abstract No. 40-7-219-t.)
5. *Study of a series of the binomial type*, by Professor W. M. Whyburn. (Abstract No. 40-7-220.)
6. *On the enumeration of magic cubes*, by Professor D. N. Lehmer. (Abstract No. 40-7-221.)
7. *On an expansion of the remainder in the Gaussian quadrature formula*, by Professor J. V. Uspensky. (Abstract No. 40-7-222.)
8. *New differentiability properties of the solution of a class of minimum problems* (preliminary report) by Dr. C. B. Morrey, Jr. (Abstract No. 40-7-223.)
9. *The interpretation of a many-valued logic as an isomorphism between rings*, by Professor Morgan Ward. (Abstract No. 40-7-224.)
10. *A note on group postulates*, by Professor Raymond Garver. (Abstract No. 40-7-225.)
11. *The quadrics of a web that have a line of vertices*, by Professor A. R. Williams. (Abstract No. 40-7-226.)
12. *On finite Boolean algebras*, by Professor B. A. Bernstein. (Abstract No. 40-7-227.)
13. *An existence theorem for total differential equations in abstract vector spaces*, by Professor A. D. Michal and Mr. V. Elconin. (Abstract No. 40-7-228-t.)
14. *Minimum values of quadratic forms*, by Professor H. F. Blichfeldt. (Abstract No. 40-7-229.)
15. *On the inversion of infinite series*, by Dr. D. H. Lehmer. (Abstract No. 40-7-230.)
16. *Arithmetic properties of a partition function*, by Dr. Marshall Hall. (Abstract No. 40-5-200-t.)
17. *The distribution laws of the difference and quotient of variables independently distributed in Pearson type III laws*, by Dr. Solomon Kullback. (Abstract No. 40-5-199-t.)

18. *A note on the distribution of a certain partial belonging coefficient*, by Dr. Solomon Kullback. (Abstract No. 40-5-201-t.)
19. *On automorphisms of certain rings*, by Dr. Jakob Levitski. (Abstract No. 40-5-202-t.)
20. *On equipotential curves*, by Professor J. L. Walsh. (Abstract No. 40-5-203-t.)
21. *On the convergence of a generalized series and the relation of its coefficients to those of the corresponding power series*, by Sister Mary Cleophas Garvin, S.N.D. (Abstract No. 40-5-204-t.)
22. *On Nevanlinna's weak summation method*, by Dr. A. F. Moursund. (Abstract No. 40-5-205-t.)
23. *On the representation of abstract Boolean algebras*, by Dr. A. L. Foster. (Abstract No. 40-5-207-t.)
24. *Certain classifications of Boolean algebras*, by Dr. A. L. Foster. (Abstract No. 40-5-208-t.)
25. *Boolean algebra and the abstract theory of algebraic ideals*, by Dr. A. L. Foster. (Abstract No. 40-5-209.)
26. *On a generalized tangent vector*, by Professor H. V. Craig. (Abstract No. 40-5-210-t.)
27. *Extension of range of functions*, by Dr. E. J. McShane. (Abstract No. 40-5-212-t.)
28. *The exact modular periods of linear recurrences*, by Dr. Marshall Hall. (Abstract No. 40-5-213-t.)
29. *On the automorphisms of Abelian groups*, by Mr. Garrett Birkhoff. (Abstract No. 40-5-214-t.)
30. *On the automorphisms of groups of prime-power order*, by Mr. Garrett Birkhoff. (Abstract No. 40-5-215-t.)
31. *Sets which are potentially regular relative to a collection of subsets*, by Professor J. H. Roberts. (Abstract No. 40-5-216-t.)
32. *The coloring of spherical maps*, by Mr. Irving Kittell. (Abstract No. 40-7-231-t.)
33. *Concerning certain locally peripherally connected spaces*, by Mr. F. B. Jones. (Abstract No. 40-7-232-t.)
34. *Note on the period of a mark in a finite field*, by Professor Morgan Ward. (Abstract No. 40-7-233-t.)

35. *Note on the iteration of functions of one variable*, by Professor Morgan Ward. (Abstract No. 40-7-234-t.)
36. *Note on an arithmetical property of recurring series*, by Professor Morgan Ward. (Abstract No. 40-7-235-t.)
37. *Uniform set-theoretic characterizations for closed  $n$ -cells*, by Professor D. W. Woodard. (Abstract No. 40-7-236-t.)
38. *The effect of dumping on monopoly price*, by Professor Raymond Garver. (Abstract No. 40-7-237-t.)
39. *Loci of  $m$ -spaces joining corresponding points of  $m+1$  projectively related  $n$ -spaces in  $r$ -space*, by Professor B. C. Wong. (Abstract No. 40-7-238-t.)
40. *Linear systems of hypersurfaces in space of  $r$  dimensions*, by Professor B. C. Wong. (Abstract No. 40-7-239-t.)
41. *On integral invariants of non-holonomic dynamical systems*, by Mr. A. E. Taylor. (Abstract No. 40-7-240-t.)
42. *The relation between Lewis's strict implication and Boolean algebra*, by Professor E. V. Huntington. (Abstract No. 40-7-241-t.)

T. M. PUTNAM,  
Associate Secretary