

## THE NOVEMBER MEETING IN CLEVELAND

The three hundred fifty-fourth meeting of the Society was held at Cleveland, Ohio, on Friday and Saturday, November 25–26, 1938, with the Case School of Applied Science and Western Reserve University as joint hosts. The attendance was about eighty, including the following fifty-four members of the Society:

G. E. Albert, W. L. Ayres, Henry Blumberg, M. G. Boyce, F. L. Brooks, O. E. Brown, R. S. Burington, W. D. Cairns, E. H. Clarke, Max Coral, Anthony Davidson, J. M. Dobbie, Ben Dushnik, T. M. Focke, L. R. Ford, Sr. M. C. Garvin, Wallace Givens, Cornelius Gouwens, V. G. Grove, Frances Harshbarger, B. A. Hausmann, T. H. Hildebrandt, C. C. Hurd, M. M. Johnson, D. K. Kazarinoff, Cornelius Lanczos, C. C. MacDuffee, H. M. MacNeille, William Marshall, E. W. Miller, Max Morris, D. C. Morrow, J. R. Musselman, A. L. Nelson, C. J. Nesbitt, Rufus Oldenburger, L. F. Ollmann, E. J. Olson, E. W. Paxson, I. E. Perlin, R. M. Peters, Everett Pitcher, E. D. Rainville, R. F. Rinehart, E. H. Rothe, George Sauté, W. G. Simon, E. C. Stopher, C. F. Thomas, R. M. Thrall, E. P. Vance, G. B. Van Schaack, C. O. Williamson, C. H. Yeaton.

The meeting opened Friday afternoon with a session devoted to short papers, followed by an address by Professor V. G. Grove of Michigan State College entitled *A tensor analysis for a  $V_k$  in a projective space  $S_n$* . On Saturday morning Professor C. C. MacDuffee of the University of Wisconsin delivered an address entitled *Modules in algebraic fields*. This was followed by another session of contributed papers.

On Friday evening a dinner was held in Haydn Hall, which was attended by fifty-eight persons. Professor R. S. Burington presided at the dinner and President Winfred G. Leutner of Western Reserve University and President William Wickenden of the Case School of Applied Science welcomed the members of the Society on behalf of the two host institutions. Professor W. D. Cairns then spoke on the early history of the Mathematical Association of America, its relations to the Society, and some interesting experiences as Secretary of the Association.

Dean W. G. Simon presided at the Friday afternoon session and Professor L. R. Ford presided at the session on Saturday morning. At the Saturday morning session Professor A. L. Nelson presented a resolution of appreciation to the Departments of Mathematics of the Case School of Applied Science and Western Reserve University for their many courtesies extended during the meeting. The titles of papers read at the meeting follow. Those whose abstract numbers

are followed by the letter *t*, were read by title. Mr. J. F. Kenney was introduced by Professor D. R. Curtiss. Papers 1–8 were presented Friday afternoon and papers 9–15 on Saturday morning.

1. Max Coral: *On fields for double integral variation problems.* (Abstract 44-11-442.)

2. Everett Pitcher: *A simpler proof of a theorem of Morse.* (Abstract 44-11-454.)

3. C. J. Nesbitt: *Note on primary algebras.* (Abstract 44-11-452.)

4. Rufus Oldenburger: *Higher-dimensional determinants.* (Abstract 44-11-453.)

5. Wallace Givens: *Signatures of Lorentz matrices.* (Abstract 44-11-446.)

6. R. S. Burington: *On the congruence of matrices and associated circavariant matrices.* (Abstract 44-11-441.)

7. D. K. Kazarinoff: *Remark concerning Desargues' triangle theorem.* (Abstract 44-11-447.)

8. J. R. Musselman: *The equation of motion of equal maps.* (Abstract 44-11-451.)

9. O. E. Brown: *A least squares machine.* Preliminary report. (Abstract 44-11-440.)

10. Cornelius Lanczos: *A simple interpolation method for the representation of rugged curves.* (Abstract 44-11-449.)

11. J. M. Dobbie: *A note on a convergence proof for Fourier series.* (Abstract 44-11-445.)

12. G. E. Albert: *Asymptotic forms for a general class of hypergeometric functions with applications to the generalized Legendre functions.* (Abstract 44-9-386.)

13. E. D. Rainville: *Linear differential invariants related to the Laplace integral transformation.* (Abstract 44-11-455.)

14. E. H. Rothe: *Asymptotic solution of a boundary value problem.* (Abstract 44-11-456.)

15. R. F. Rinehart: *An interpretation of the inertia of the discriminant matrices of an associative algebra.* (Abstract 45-1-57.)

16. Reinhold Baer: *Nets and groups.* (Abstract 44-11-438-*t*.)

17. J. F. Kenney: *The regression systems of two sums having random elements in common.* (Abstract 44-11-448-*t*.)

18. M. A. Basoco: *On certain arithmetical functions due to G. Humbert.* (Abstract 44-11-439-*t*.)

19. H. V. Craig: *On extensors and a euclidean basis for higher order spaces.* (Abstract 44-11-443-*t*.)

20. Saunders MacLane: *Steinitz field towers for modular fields.* (Abstract 44-11-450-*t*.)

21. Reinhold Baer: *Groups with abelian norm quotient group.* (Abstract 44-11-437-*t*.)

22. Reinhold Baer: *Almost Hamiltonian groups.* (Abstract 44-11-436-*t*.)

23. J. J. DeCicco: *The analogue of the nine-point circle in the associated Kasner plane.* (Abstract 44-11-444-*t*.)

W. L. AYRES,  
Associate Secretary

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### THE NOVEMBER MEETING IN LOS ANGELES

The three hundred fifty-fifth meeting of the American Mathematical Society was held at the University of California at Los Angeles on Saturday, November 26, 1938. The attendance included the following thirty-eight members of the Society:

L. J. Adams, O. W. Albert, L. D. Ames, H. A. Arnold, H. M. Bacon, Harry Bate-  
man, Clifford Bell, E. T. Bell, Myrtie Collier, P. H. Daus, R. P. Dilworth, C. H. Dix,  
H. E. Glazier, H. J. Hamilton, E. R. Hedrick, D. G. Humm, G. H. Hunt, Glenn  
James, R. D. James, A. T. Lonseth, W. A. Manning, W. E. Mason, A. D.  
Michal, R. M. Robinson, A. A. Shaw, G. E. F. Sherwood, D. V. Steed, Gabor Szegö,  
A. E. Taylor, T. Y. Thomas, S. E. Urner, J. V. Uspensky, F. A. Valentine, D. E.  
Whelan, P. A. White, W. M. Whyburn, E. R. Worthington, Max Zorn.

The meeting was called to order at 10:00 A.M., and was presided over at different times by Professors E. T. Bell, R. D. James, Gabor Szegö, and T. Y. Thomas.

On Saturday afternoon a tea for members of the Society and their friends was given by Professor and Mrs. E. R. Hedrick at their home.

Titles of papers read at the meeting follow. Those whose abstract numbers are followed by the letter *t* were read by title.

1. R. M. Robinson: *A generalization of Picard's and related theorems.* (Abstract 44-9-405.)

2. A. A. Shaw: *Mathematical passages in the works of David the Invincible.* (Abstract 44-11-428.)

3. F. A. Valentine: *The problem of Lagrange with finite inequalities as side conditions.* (Abstract 44-11-433.)

4. H. J. Hamilton: *Preservation of partial limits in multiple sequence transformations.* (Abstract 44-11-422.)

5. A. E. Taylor: *Reflexive Banach spaces.* I. Preliminary report. (Abstract 44-11-430.)