## BULLETIN

## OF THE

## AMERICAN MATHEMATICAL SOCIETY

## THE THANKSGIVING MEETING IN PASADENA

The three hundred tenth regular meeting of the Society was held at the California Institute of Technology, Saturday, December 2, 1933. The meeting was called to order at 9:30 A.M. by Professor W. F.Osgood.

The attendance included the following twenty-four members:

O. W. Albert, L. D. Ames, H. M. Bacon, Harry Bateman, E. T. Bell, C. P. Brady, Myrtie Collier, P. H. Daus, Raymond Garver, H. E. Glazier, E. R. Hedrick, Glenn James, D. N. Lehmer, A. D. Michal, W. F. Osgood, T. M. Putnam, G. E. F. Sherwood, D. V. Steed, S. E. Urner, Morgan Ward, L. E. Wear, W. M. Whyburn, C. L. E. Wolfe, E. R. Worthington.

Luncheon for members and their guests was served at the Athenaeum of the California Institute of Technology.

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

1. On the Nevanlinna and Bosanquet-Linfoot summation methods, by Dr. A. F. Moursund. (Abstract No. 39-11-325-t.)

2. Ternary continued fractions in a cubic field, by Professor P. H. Daus. (Abstract No. 39-11-326.)

3. Ternary continued fractions for cubic units, by Professor P. H. Daus. (Abstract No. 39-11-327-t.)

4. A census of squares of order 4, magic in the rows, columns, and diagonals, by Professor D. N. Lehmer. (Abstract No. 39-11-328-t.)

5. Matrix differential systems, by Professor W. M. Whyburn. (Abstract No. 39-11-329.)

6. On the properties of a determinant function, by Professor Clifford Bell. (Abstract No. 39-11-330-t.)

7. Interpolation in the mathematics of finance, by Professor Clifford Bell. (Abstract No. 39-11-331-t.)

8. A set of postulates for "Riemannian" differential geometry in abstract vector spaces, by Professor A. D. Michal. (Abstract No. 39-11-332.)

9. A theory of parallel displacement and curvature for "Riemannian" differential geometry in abstract vector spaces, by Professor A. D. Michal. (Abstract No. 39-11-333-t.)

10. Existence theorems for analytic solutions of ordinary, certain partial, and total differential equations in abstract vector spaces (preliminary report), by Professor A. D. Michal. (Abstract No. 39-11-334-t.)

11. Analytical and geometrical investigations in normed linear algebras with a finite or denumerably infinite basis (preliminary report), by Professor A. D. Michal. (Abstract No. 39-11-335-t.)

12. Abstract dynamical systems and contact transformations (preliminary report), by Professor A. D. Michal. (Abstract No. 39-11-336-t.)

13. Linear connections and non-Riemannian differential geometry in abstract vector spaces, by Professor A. D. Michal.(Abstract No. 39-11-337-t.)

14. On definitions of abstract polynomials and analytic functions in abstract vector spaces, by Professor A. D. Michal. (Abstract No. 39-11-338-t.)

15. A critique of the postulate systems for abstract vector spaces and abstract Hilbert space, by Professor A. D. Michal. (Abstract No. 39-11-339-t.)

16. A partial differential equation connected with the functions of the parabolic cylinder, by Professor Harry Bateman. (Abstract No. 39-11-340.)

17. Exponential polynomials, by Professor E. T. Bell. (Abstract No. 39-11-341.)

18. On the second case of Fermat's last theorem, by Professor Glenn James. (Abstract No. 39-11-342.)

19. On certain methods in dynamics, by Professor W. F. Osgood. (Abstract No. 39-11-343.)

20. A law of reciprocity for the entries in a table of linear forms, by Professor D. N. Lehmer. (Abstract No. 40-1-1.)

21. The diophantine equation  $X^2 - DY^2 = Z^M$ , by Professor Morgan Ward. (Abstract No. 40-1-2.)

22. A plane rational curve of order 2k+1, by Dr. D. C. Duncan. (Abstract No. 40-1-3-t.)

23. The apparent contour of the general  $V_{3^n}$  in  $S_4$ , by Professor A. R. Williams. (Abstract No. 40-1-4-t.)

T. M. PUTNAM, Associate Secretary