

THE JUNE MEETING IN MISSOULA

The four hundred ninety-third meeting of the American Mathematical Society was held at Montana State University, Missoula, Montana, on June 20, 1953. There were approximately seventy registrations, including the following forty-one members of the Society:

T. M. Apostol, B. H. Arnold, M. G. Arsove, Wilfred E. Barnes, R. A. Beaumont, L. G. Butler, Harold Chatland, P. A. Clement, C. M. Cramlet, R. Y. Dean, D. B. Dekker, F. E. Ehlers, Paul Erdős, R. M. Gordon, S. G. Hacker, M. E. Haller, C. A. Hayes, R. D. James, T. R. Jenkins, H. E. Kinerk, J. M. Kingston, M. S. Knebelman, R. B. Leipnik, A. T. Lonseth, A. S. Merrill, W. E. Milne, Leo Moser, W. M. Myers, Jr., Ivan Niven, A. R. Noble, I. L. Olson, T. G. Ostrom, W. T. Putney, R. A. Rosenbaum, R. G. Selfridge, A. J. Smith, W. M. Stone, J. R. Vatnsdal, R. M. Winger, R. J. Wisner, F. H. Young.

By invitation of the Committee to Select Hour Speakers for Far Western Sectional Meetings, Professor A. T. Lonseth of Oregon State College addressed the Society on *Approximate solutions of Fredholm-type integral equations*. The speaker was introduced by Professor R. M. Winger. The session for contributed papers began at ten o'clock Saturday morning. The presiding officer was Professor M. S. Knebelman. On June 19 there was the Pacific Northwest Sectional Meeting of the Mathematical Association of America. The hour speaker was Professor Leo Moser who addressed the Association on *The distribution of quadratic residues*. There was a joint dinner for members of the Society and the Association and their guests at the Hotel Florence, followed by a social hour at the Faculty Club.

Abstracts of the papers presented follow. Those whose abstract numbers are followed by "t" were presented by title. Paper number 530 was presented by Dr. J. E. Maxfield, number 534 by Professor Erdős, number 536 by Professor Hayes, and number 539 by Professor Leipnik. Professor Ohtsuka was introduced by Professor A. J. Lohwater.

ALGEBRA AND THEORY OF NUMBERS

526. T. M. Apostol: *Some series involving the Riemann zeta function*.

V. Ramaswami [J. London Math. Soc. vol. 9 (1934) pp. 165-169] has obtained three formulas which can be employed to obtain the analytic continuation of Riemann's zeta function $\zeta(s)$ over the whole s -plane. If $P_n(s)$ denotes the polynomial defined by $n!P_n(s) = s(s+1)(s+2) \cdots (s+n-1)$, then one of these formulas can be expressed as follows: $\zeta(s)(1-2^{-s}-3^{-s}-6^{-s}) = 1 + 2 \sum_{n=1}^{\infty} P_{2n}(s) \zeta(2n+s) 6^{-2n-s}$. In this paper simple properties of the Hurwitz zeta function are used to obtain the general