

THE JUNE MEETING IN VANCOUVER

The five hundred fifteenth meeting of the American Mathematical Society was held at the University of British Columbia, Vancouver, Canada, on Saturday, June 18, 1955, following the meeting on Friday of the Pacific Northwest Section of the Mathematical Association of America. Attendance was 71, including 54 members of the Society.

By invitation of the Committee to Select Hour Speakers for Far Western Sectional Meetings, Professor Iacopo Barsotti of the University of Pittsburgh and University of Southern California addressed the Society on *Algebraic group-varieties*. He was introduced by Professor R. M. Winger. Professor T. E. Hull presided at the session for contributed papers.

On Friday evening before the meeting there was a joint dinner of the Society and the Association, at which the visitors were greeted by Dean W. H. Gage of the University of British Columbia.

Following are the abstracts of papers presented at the meeting, those whose numbers are followed by "t" having been read by title. Mr. John was introduced by Professor Casper Goffman, Mr. Kobayashi by Professor C. B. Allendoerfer, Mr. Montague by Mr. Dana Scott, Dr. Saworotnow by Professor Choy-tak Taam, and Professor Wasel by Reverend T. J. Saunders.

ALGEBRA AND THEORY OF NUMBERS

596. R. A. Beaumont: *Free R -modules and algebras over a noncommutative ring.*

Let ${}_mR_n$ be the set of m by n matrices over a ring R with identity. A matrix A in ${}_mR_n$ is a unit if there exists a matrix B in ${}_nR_m$ such that $AB = I_m$ and $BA = I_n$. The only rings for which units exist ($m \neq n$) are noncommutative rings which satisfy neither chain condition for right ideals or for left ideals. Every free R -module has a unique basis number if and only if there are no units in ${}_mR_n$ for every $m, n, m \neq n$. A necessary and sufficient condition is found for the equivalence of algebras over a noncommutative ring. This condition is in the form of a matrix identity involving the multiplication tables of the algebras. (Received May 5, 1955.)

597. D. G. Higman: *On integral representations of orders in separable algebras.*

J.-M. Maranda has recently established a very interesting set of results concerning representations of finite groups by groups of automorphisms of modules finitely generated over Dedekind rings (Canadian Journal of Mathematics vol. 5 (1953) pp. 344–355, and a second paper to appear soon in the same Journal). For representations Γ , Δ of the group ring \mathfrak{D} by matrices in a Dedekind ring \mathfrak{o} , and \mathfrak{a} an integral ideal in \mathfrak{o} ,