

1106-VJ-2390      **Andrew F. Misseldine\***, Southern Utah University, Mathematics Department, 351 West University Blvd., Cedar City, UT 84720. *Primitive Idempotents of Schur Rings.*

In this talk, we explore the nature of central idempotents of Schur rings over finite groups. We introduce the concept of a lattice Schur ring and explore properties of these kinds of Schur rings. In particular, the primitive, central idempotents of lattice Schur rings are completely determined. For a general Schur ring  $S$ ,  $S$  contains a maximal lattice Schur ring, whose central, primitive idempotents form a system of pairwise orthogonal, central idempotents in  $S$ . We show that if  $S$  is a Schur ring with rational coefficients over a cyclic group, then these idempotents are always primitive and are spanned by the normal subgroups contained in  $S$ . (Received September 16, 2014)