1134-05-395 **Megan Ly*** (megan.ly@colorado.edu). *Schur–Weyl Duality for Unipotent Upper Triangular Matrices.*

Schur–Weyl duality is a fundamental framework in combinatorial representation theory. It intimately relates the irreducible characters of the symmetric group to the irreducible characters of the general linear group via their commuting actions on tensor space. We investigate the analog of Schur-Weyl duality for the group of unipotent upper triangular matrices over a finite field. In this case, the character theory of these upper triangular matrices is unattainable. Thus we employ a generalization, known as supercharacter theory, to create a striking variation on the character theory of the symmetric group with combinatorics based on set partitions. We present a combinatorial structure that encodes the decomposition of a tensor space into supercharacters in order to describe the maps that centralize the action of the group of unipotent upper triangular matrices. (Received September 12, 2017)