1023-20-1026 P. Diaconis and N. Thiem* (thiem@math.stanford.edu). A supercharacter theory for unipotent groups.

It is well-known that the representation theory of many finite unipotent groups is wild (for example, the group of upper-triangular matrices over a finite field with ones on the diagonal). A supercharacter theory is a coarser version of the usual character theory that preserves much of the information while becoming more manageable. This talk describes a supercharacter theory for pattern groups, a large class of finite unipotent groups that include the unipotent radicals of type A parabolics. (Received September 24, 2006)