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P. Diaconis and **N. Thiem*** (thiem@math.stanford.edu). *A supercharacter theory for pattern 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. For example, in the case of the full upper-triangular unipotent group, the supercharacters are indexed by labeled set partitions. This talk describes a supercharacter theory for a large family of unipotent groups related to incidence algebras of posets, called pattern groups. (Received September 11, 2006)