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**Scott Andrews\*** ([scott.andrews@colorado.edu](mailto:scott.andrews@colorado.edu)). *The Hopf monoid on nonnesting supercharacters.*

Indexing the irreducible representations of  $UT_n(\mathbb{F}_q)$ , the group of unipotent upper-triangular matrices over the field with  $q$  elements, is known to be a wild problem. Recently this problem has been studied via supercharacter theories. I will present a supercharacter theory of  $UT_n(\mathbb{F}_q)$  with supercharacters and superclasses indexed by nonnesting labeled set partitions. This supercharacter theory generalizes to a large class of subgroups of  $UT_n(\mathbb{F}_q)$  that are known as pattern groups. Studied as a collection, the spaces of superclass functions on pattern groups form a Hopf monoid whose product and coproduct have nice combinatorial descriptions. (Received August 11, 2014)