

1077-20-1783      **Michael R Bush\*** ([mbush@smith.edu](mailto:mbush@smith.edu)), Dept. of Mathematics and Statistics, Smith College,  
Northampton, MA 01063. *Schur  $\sigma$ -groups of small prime power order.*

Schur  $\sigma$ -groups are a class of pro- $p$  groups first defined by Koch and Venkov in 1975. They arise naturally in algebraic number theory as the Galois groups of maximal unramified  $p$ -extensions of imaginary quadratic fields. In this talk, I'll describe work in progress to classify finite  $p$ -groups of this type using tools from computational group theory. If time permits, I'll also give a brief overview of some joint work with Nigel Boston and Farshid Hajir in which we give a heuristic for how often one expects a particular finite  $p$ -group of this type to arise as a Galois group. (Received September 20, 2011)