1012-16-217   **Eric Friedlander**, **Julia Pevtsova*** (`julia@math.washington.edu`) and **Andrei Suslin**.
Generic Jordan type of modular representations.

In his seminal papers of 1976, D. Quillen introduced the study of cohomology and geometry arising from it as a tool to obtain intrinsic information about finite groups. The geometric methods he developed were further applied to the study of representations of finite groups and other incarnations of finite group schemes, such as restricted Lie algebras. The geometric invariant associated to a representation which grew out of Quillen's work is known as support variety. Even though support varieties proved to be a powerful and useful invariant, one can hope to find finer information encoded geometrically. In this talk we introduce two new invariants associated to modular representations which can be considered both as a refinement and a counterpart to support varieties: generic Jordan type of a representation and a "non-maximal" support variety. (Received September 20, 2005)