Topology Seminar

Burt Totaro

of University of Cambridge will be speaking on

New bounds for the cohomology and Chow ring of finite groups

on April 9 at 4:30 in
MIT Room 2-131

Symonds (2010) showed that the cohomology ring of a finite group G with a faithful complex representation of dimension n is generated by elements of degree at most n^2. This was a remarkable advance, since no bound was known before. Symonds's proof combined equivariant cohomology with commutative algebra (Castelnuovo-Mumford regularity). We give better bounds for the cohomology ring of a p-group. The methods also apply to the Chow ring of algebraic cycles on BG.