



Speaker: David Treumann
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Thursday, September 8, 2011
2:00 PM
125 Hayes-Healy Hall

Title: Smith theory and geometric Hecke algebras

Abstract:

In 1960 Borel proved a "localization" result relating the rational cohomology of a topological space X to the rational cohomology of the fixed points for a torus action on X . This result and its generalizations have many applications in Lie theory. In 1934, P. Smith proved a similar localization result relating the mod p cohomology of X to the mod p cohomology of the fixed points for a \mathbb{Z}/p -action on X . I will discuss an application of Smith theory to loop groups, and how it is related via the geometric Satake correspondence to some special homomorphisms between algebraic groups in small characteristic.