## Queen's Algebraic Geometry — Seminar —

## Ordinary Characters and Spherical Characters

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## Abstract

Let H be the group of fixed points of an involution (automorphism of order two) of a group G. A representation of G is said to be H-distinguished if there exists a nonzero H-invariant linear functional on the space of the representation. Suppose that G is a reductive p-adic group. If an irreducible representation of G is H-distinguished, and if its contragredient (smooth dual) is also H-distinguished, then we may define H-biinvariant distributions on G (where H acts on G by multiplication on the left and right). Such distributions are called spherical characters. We will talk about some basic properties of spherical characters and indicate how these properties can be viewed as analogues of some properties of ordinary characters. No prior knowledge of representation theory of reductive p-adic grous or of spherical characters will be assumed.

Monday, March 5, 2007 4:30pm – 5:30pm 115 Jeffery Hall