## Queen's Algebraic Geometry — Seminar —

## A CONJECTURE IN NONMODULAR INVARIANT THEORY

## MIKE ROTH Queen's University

## Abstract

It seems hard to believe that there is a general question about the invariants of finite groups in the nonmodular case which is not well understood, but there is: What's missing is a relative version of invariant theory, similar to Brauer's theorems on relative representations.

This introductory talk will briefly describe Brauer's theory, and formulate the natural analogue for invariants, as well as discuss the evidence for such a conjecture.

The natural language to express the conjecture is that of algebraic geometry, but mostly only very basic algebraic geometry will be used. A few of the basic facts will be recalled, so I hope that the talk will be accessible to those who aren't experts.

> Monday, October 25, 2004 2:30pm – 3:30pm 422 Jeffery Hall