



PURDUE UNIVERSITY

Department of Mathematics Colloquium

Speaker: Professor Lawrence Ein, University of Illinois at Chicago

Title: "Invariants of Singularities of Pairs"

Date: Tuesday, April 25, 2006

Time: 4:30 P.M.

Place: MATH 175

Abstract

Let X be a smooth variety and Y a closed subvariety of X , or more generally a closed subscheme of X . We are interested in invariants attached to the singularities of the pair (X, Y) . We will discuss various methods to construct such invariants coming from the theory of multiplier ideals, D -modules, the geometry of the space of arcs. We would also present some applications of these invariants to commutative algebra, higher dimensional birational geometry and to singularities.

Refreshments will be served in the Math Library Lounge, 4:00 P.M.