



Speaker: James Freitag
UIC

Tuesday, October 25, 2011
1:30 PM
125 Hayes-Healy Hall

Title: Strongly connected differential algebraic groups

Abstract:

We will discuss strongly connected differential algebraic groups in the sense of Cassidy and Singer. We will discuss some definability results in this category and analogies with groups of finite Morley rank.

Particularly, this analogy involves treating the leading coefficient of the Kolchin polynomial, the typical differential dimension, in the way that one treats Morley rank (for groups of FMR).

The Kolchin polynomial is a differential analogue of the Hilbert polynomial and leads to several important differential birational invariants. No background from differential algebra will be assumed for the talk.