Department of Mathematics
University of Notre Dame

MODEL THEORY SEMINAR

Guest Speaker: Ruizheng Jin
University of Waterloo

Date: Tuesday, September 26, 2017
Time: 11:00 AM
Location: 125 Hayes-Healy Hall

Lecture Title:
Constructing analyzable types in differentially closed fields with log derivatives
Abstract

We generalize the well-known fact that the equation $\delta(\log\delta x) = 0$ is analyzable in but not internal to the constants. We use the logarithmic derivative as a building block to construct analyzable types with a unique analysis of minimal length (up to interalgebraicity). We also look for criteria for a given definable set such that its pre-image under the logarithmic derivative is analyzable in but not internal to the constants.