Department of Mathematics University of Notre Dame

MODEL THEORY SEMINAR

Guest Speaker: Remi Jaoui University of Notre Dame

Date: Tuesday, September 17, 2019 *Time:* 10:45 AM *Location:* 125 Hayes-Healy Hall



Lecture Title: Disintegration of planar vector fields, Part II

Abstract

What is the theory of the set of solutions (in a differentially closed field) of a planar algebraic vector field chosen randomly among complex planar algebraic vector fields of sufficiently large degree? The natural conjecture is that this theory is (up to the singularities of the vector field) the one of a pure infinite set, as it is the case in dimension one. In my talk, I will explain a proof that this theory is strongly minimal and disintegrated based on a combination of methods from geometric stability theory and from the local analytic theory of singularities of vector fields.