Mathematics, Statistics, and Computer Science   **@ UIC**

Logic Seminar

Introduction to motivic integration and applications

Jorge Cely (University of Pittsburgh)

Abstract: This talk will be divided in two parts. In the first part, I will introduce Cluckers-Loeser theory of motivic integration, stressing the role of the model theory of valued fields in the Denef-Pas language. I will talk about transfer principles (in the style of Ax-Kochen).

Then, in the second part, I will discuss the definability (in the Denef-Pas language) of some objects in harmonic analysis of p-adic groups. I will not have time to talk about the fundamental lemma with some detail, nevertheless, I will mention it and roughly I will explain how to put it in the framework of motivic integration.

Tuesday, April 12 at 4:00 PM in SEO 427