



Speaker: Andrei Minchenko
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Tuesday, November 10, 2015

2:00 PM

125 Hayes-Healy Hall

Title: The Galois group of a parametrized linear differential equation

Abstract:

We will start with the definition and basic properties of the parametrized differential Galois group. It is an important problem of differential Galois theory to build an algorithm that computes this group starting from a differential equation with parameters. An algorithm for the non-parametric case was found by Hrushovski in 2002, while the parametric case remains unsolved. I will recall recent results with A. Ovchinnikov and M. Singer that give partial solution to this question, and will finish by explaining an approach to solve the problem in general.