Departmental Colloquium

Model theory and Painleve equations James Freitag (The University of Illinois at Chicago)

Abstract: Painleve equations are certain order two nonlinear differential equations which were isolated around the beginning

of the last century by Painleve, Gambier, and Fuchs for reasons related to classical analytic problems. The equations arise in a variety of applications from physics to Diophantine geometry. In this talk, we will discuss how model theory can be used to resolve some open problems around the transcendence of Painleve equations.

Friday, March 31 at 3:00 PM in SEO 636