

GRADUATE STUDENT GEOMETRY SEMINAR

Guest Speaker: Ilya Marchenko

University of Notre Dame

Date: Monday, September 20, 2021

Time: 2:30 PM

Location: 258 Hurley Hall

Zoom URL:



Lecture Title:

Łojasiewicz Inequalities and Generic Smoothness of Nodal Sets of Solutions to Elliptic PDE

Abstract

A recent preprint by Badger, Engelstein, and Toro shows that the zero sets of solutions for a broad class of second-order elliptic PDE's (including the Laplacian) are smooth for generic L^2 data. The authors also establish an effective version of the Łojasiewicz inequality for solutions to elliptic PDE. We will present an overview of the proofs of these results.