

## ***GEOMETRIC ANALYSIS SEMINAR***

**Speaker: Ilya Marchenka**  
**University of Notre Dame**

**Date:** Thursday, February 13, 2020

**Time:** 11:00 AM

**Location:** 258 Hurley Hall



***Lecture Title:***

**Introduction to Nodal Sets**

***Abstract***

Let  $u$  be a solution of an elliptic equation  $Lu = 0$  on a domain  $\Omega \subseteq \mathbb{R}^n$ . We discuss some properties of the set  $u^{-1}(0)$  - the so-called nodal set of  $u$ . In particular, we discuss some key ideas behind classical results on the Hausdorff measure of such sets.