## **Department of Mathematics** University of Notre Dame

# **GEOMETRIC ANALYSIS SEMINAR**

### **Speaker: Samuel Perez-Ayala University of Notre Dame**

Date: Thursday, October 15, 2020

*Time:* 11:00 AM

Location: Zoom

**Zoom URL:** notredame.zoom.us/j/96288130964? pwd=c2dDelJJTXhSdTBVSEtLYII1NEdzZz09



### *Lecture Title:* Extremal Metrics for the Conformal Laplacian

#### Abstract

In this talk I will discuss the existence and properties of extremal metrics for the spectrum of the Conformal Laplacian. As I will explain, depending on various conformally invariant quantities, such extremal metrics are associated with either constant scalar curvature metrics (Yamabe metrics), nodal solutions to known PDEs or Harmonic maps into spheres. This is joint work with Matt Gursky.