

## ***GRADUATE STUDENT SEMINAR***

**Guest Speaker: Jason Mitrovich**

**University of Notre Dame**

**Date:** Monday, November 13, 2023

**Time:** 5:00 PM

**Location:** 258 Hurley Bldg

**Zoom URL:** NA



***Lecture Title:***

**The resolution of the Yamabe problem**

***Abstract***

The Yamabe problem is concerned with searching for conformal metrics from a prescribed scalar curvature. In this talk, I will first discuss some background regarding conformal metrics and scalar curvature. Then I will discuss Yamabe's original motivation and how this problem is connected to Poincaré's conjecture. With this, I will sketch out a proof for the Yamabe problem when we consider a restricted class of Riemannian manifolds. With the remaining time, I will discuss some progress made in other cases of interest.