

GRADUATE STUDENT SEMINAR

Guest Speaker: Jason Mitrovich

University of Notre Dame

Date: Tuesday, March 28, 2023

Time: 4:00 PM

Location: 258 Hurley Hall

Zoom URL: notredame.zoom.us/j/93888654312



Lecture Title:

An Intro to 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.