Department of Mathematics University of Notre Dame

GEOMETRIC ANALYSIS SEMINAR

Speaker: Samuel Perez-Ayala Princeton University

Date: Thursday, April 25, 2024 Time: 11:00 AM Location: 258 Hurley Bldg Zoom URL: NA



Lecture Title:

Eigenvalue Estimates for Asymptotically Hyperbolic Manifolds and their Submanifolds

Abstract

I will explain how to obtain sharp upper bounds for the first eigenvalue $\lambda_{1,p}$ of the *p*-Laplacian on any asymptotically hyperbolic manifolds. I will also talk about lower bounds for the first eigenvalue (p=2) on complete and non-compact submanifolds living in Poincaré-Einstein spaces whose boundary is of non-negative Yamabe type. This is joint work with Aaron J. Tyrrell.