## 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 ( $\mathrm{p}=2$ ) 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.

