Khoi Nguyen - University of Notre Dame

Department of Mathematics University of Notre Dame

GRADUATE STUDENT SEMINAR

Guest Speaker: Khoi Nguyen University of Notre Dame

Date: Tuesday, May 2, 2023

Time: 4:00 PM

Location: 258 Hurley Hall

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



Lecture Title:

Scalar curvature under the collapse of metric

Abstract

We prove a formula for the scalar curvature of a Riemannian manifold in terms of an orthonormal frame adapted to a distribution. Using the formula, we then investigate the effect of collapsing the metric along the distribution on the scalar curvature. This work is towards an effort of better understanding the scalar curvature of a manifold and its effect under scaling the underlying Riemannian metric.