Rigidity Results in Scalar Curvature

by

Harry Yipeng Wang
Columbia University

Abstract
A central theme in Gromov’s program is the exploration of the implications of metric geometry for spaces with scalar curvature bounded from below. Inspired by Toponogov’s triangle comparison theorem on manifolds with nonnegative sectional curvature, Gromov postulated a conjecture regarding the scalar curvature extremality property of convex polytopes. In his ‘Four Lectures’, he also outlined a proof based on a smoothing procedure. In this talk, I will discuss some recent progress on this problem, as well as several aspects of its generalizations and open questions.

Date : 26 June 2024 (Wednesday)
Time : 4:00p.m.-5:00p.m.
Venue : Room 5510 (near Lift 25/26)

All are Welcome!