

Mathematics Colloquium

Geometry of compact Riemannian manifolds with convex boundary

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Abstract

I will focus on compact Riemannian manifolds with Ricci curvature bounded from below and convex boundary. The basic question is to understand the relationship between the geometry on the boundary and geometry of the interior. I will first survey some old results. Then I will explain a new approach to estimating the size of such an object in terms of its volume, the area of its boundary and other geometric invariants. I will present some open problems and partial results.

Wednesday, 14 February 2018, 4pm Smith Hall 204

Tea and refreshments will be served at 3:45pm.