Fall 2025

Geometry and Topology Seminar

Title

Stability of Ricci flow and Volume Comparison for Finite-volume Hyperbolic 3-manifolds

Speaker:	Massachusetts Institute of Technology
Date:	November 7, 2025
Time:	9:30AM (China Standard Time)
Tencent Meeting (VooV):	382 868 2051, Password: 202511

Abstract: In this talk, I will discuss finite-volume hyperbolic 3-manifolds. If the initial metric is close to the hyperbolic metric h_0, then the normalized Ricci-DeTurck flow exists for all time and converges exponentially fast to h_0 in a weighted Hölder norm.

Furthermore, I will also present an application to volume comparison, which shows that among metrics with scalar curvature bounded below by -6, h_0 minimizes the volume.