

Department of Mathematics

The Institute of Mathematical Sciences

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## Joint Geometric Analysis Seminar

(Part of MIST program

## Ricci flow and positivity of curvatures on manifolds with boundary

## Dr. Aaron Chow Tsz-Kiu Columbia University

## <u>Abstract</u>

In this talk, we would discuss how to construct a canonical solution to Ricci flow on manifolds with boundary given an arbitrary initial metric. This solution behaves well with respect to natural curvature conditions for Ricci flow on closed manifolds. Our construction has the advantage of preserving various important curvature conditions along the flow under natural assumptions on the boundary. As an application, this produces pleasant topological consequences for manifolds with boundary.

Date: April 13, 2023 (Thursday)

Time: 1:00pm-2:00pm

Venue: LSB 222 (in-person)