



THE HONG KONG UNIVERSITY OF SCIENCE & TECHNOLOGY

Department of Mathematics

SEMINAR ON PURE MATHEMATICS

Positivity of curvature on manifolds with boundary

by

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Abstract

Consider two Riemannian metrics g and h on a compact manifold with smooth boundary. In this talk, we will discuss how to construct metrics which agree with h outside a neighbourhood of the boundary and agree with g in the same neighbourhood, such that the metrics constructed preserve various natural curvature conditions under suitable assumptions on the boundary data. Moreover, we will discuss how this result can be applied to preserve curvature conditions in Ricci flow on manifolds with boundary.

Date : 10 August 2022 (Wednesday)

Time : 4:50pm – 5:50pm

Venue : Room 3494 (near Lifts 25/26)

Zoom Meeting : <https://hkust.zoom.us/j/92883040936> (Passcode: 558687)

All are Welcome!