

THE UNIVERSITY



OF HONG KONG

*Institute of Mathematical Research
Department of Mathematics*

COLLOQUIUM

Total Q-prime curvature

Professor Paul Yang

Princeton University, USA

Date: February 11, 2026 (Wednesday)

Time: 4:00 – 5:00pm

Venue: Room 210, Run Run Shaw Bldg., HKU

Abstract

CR structure in dimension three encodes the geometry of a 3-manifold which is the boundary of a complex two dimensional domain. Associated to such structure is a local curvature invariant called the Q-prime curvature. It is a fourth order quantity. There is a global formula relating the integral of the Q-prime curvature to the Euler number of the domain. I will discuss how this quantity controls the number of ends of this domain.

All are welcome