



THE HONG KONG UNIVERSITY OF SCIENCE & TECHNOLOGY

Department of Mathematics

SEMINAR ON PURE MATHEMATICS

**Curvature Estimates along Immortal
Kähler-Ricci Flows**

by

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Abstract

On a compact Kähler manifold X , a Kähler-Ricci flow (KRF) is immortal when the canonical bundle of X is numerically effective. In this case, assuming the abundance conjecture and intermediate Kodaira dimension, the collapsing behavior of the normalized KRF, as already known, poses difficulty on uniform curvature estimates. We extend known C^0 estimates on the scalar curvature (by Song-Tian) and Ricci curvature (recently by Hein-Lee-Tosatti) to orders up to 2, and explain the failure for higher orders in general.

Date : 8 July 2026 (Wednesday)

Time : 4:00p.m.-5:00p.m.

Venue : Room 2463 (near Lift 25/26)

All are Welcome!