



THE HONG KONG UNIVERSITY OF SCIENCE & TECHNOLOGY

Department of Mathematics

SEMINAR ON PDE

Geometric flows in symplectic geometry

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Abstract

Geometric flows have been proven to be powerful tools in the study of many important problems arising from both geometry and theoretical physics. Aiming to study the equations from the flux compactifications of Type IIA superstrings, we introduce the so-called Type IIA flow, which is a flow of closed and primitive 3-forms on a symplectic Calabi-Yau 6-manifold. Remarkably, the Type IIA flow can also be viewed as a flow as a coupling of the Ricci flow with a scalar field. In this talk, we will discuss the recent progress on this flow. This is based on a joint project with Fei, Phong and Picard.

Date: 21 October 2022 (Friday)

Time: 9:00am

Zoom Meeting: <https://hkust.zoom.us/j/91361127888> (Passcode: 877592)

All are Welcome!