

THE UNIVERSITY



OF HONG KONG

*Institute of Mathematical Research  
Department of Mathematics*

## GEOMETRY SEMINAR

# Extremal Kähler metrics on symplectic manifolds of toric type

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### Abstract

The problem of finding 'best possible' metrics on a manifold is a classical question in Riemannian geometry. For Kähler manifolds, Calabi introduced the notion of an extremal Kähler metric. I will discuss the problem of finding extremal Kähler metrics on a class of symplectic manifolds that generalizes the well-known symplectic toric manifolds. We show that the Abreu-Guillemin-Donaldson theory extends to this more general setting, providing new examples of extremal Kähler metrics. This presentation is based on ongoing joint work with Miguel Abreu (IST-Lisbon) and Maarten Mol (Toronto).

Date:	October 11, 2024 (Friday)
Time:	1:30 - 2:30pm
Venue:	Rm 210, Run Run Shaw Bldg., HKU

*All are welcome*