

THE UNIVERSITY



OF HONG KONG

*Institute of Mathematical Research
Department of Mathematics*

GEOMETRY SEMINAR

Convexity Properties of Presymplectic Hamiltonian Actions

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Abstract

A celebrated theorem in symplectic geometry, due to Atiyah, Guillemin-Sternberg and Kirwan, states that the image of the moment map of a compact Lie group action is a convex polytope. I will present a generalization of this result, obtained in joint work with Yi Lin, to compact Lie group actions on presymplectic manifolds. Our result implies convexity theorems for actions on contact manifolds, cosymplectic manifolds, as well as certain symplectic “generalized manifolds”.

Date: February 8, 2017 (Wednesday)

Time: 4:00 – 5:00pm

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

All are welcome