THE UNIVERSITY



**OF HONG KONG** 

Institute of Mathematical Research Department of Mathematics

## **GEOMETRY SEMINAR**

## VMRT-structures on Fano contact manifolds

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## Abstract

A major problem in the theory of holonomy groups of Riemannian manifolds is Le Brun-Salamon's conjecture that a quaternionic Kähler manifold of positive scalar curvature is a symmetric space. By the twister construction, the conjecture is equivalent to the statement that a Kähler-Einstein Fano manifold with a holomorphic contact structure is homogeneous. We explain the approach to Le Brun Salamon's conjecture via the study of VMRT-structures on Fano manifolds, and report on some recent progress in this approach.

Date: July 13, 2016 (Wednesday)

Time: 4:00 – 5:00pm

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

All are welcome