THE UNIVERSITY



OF HONG KONG

Institute of Mathematical Research Department of Mathematics

GEOMETRY SEMINAR

Construction of Lie groupoids and Poisson groupoids

Mr. Songhao LiUniversity of Toronto

Abstract

After recalling the notion of Lie groupoids and Lie algebroids, we introduce a blow-up construction of Lie groupoids and Poisson groupoids, which corresponds to an elementary modification of Lie algebroids and Lie bialgebroids. As an application, we construct the adjoint symplectic groupoid of a log symplectic manifold. If time permits, we will also introduce a gluing construction of Lie groupoids and use it to classify the Hausdorff symplectic groupoids of a log symplectic manifold.

Date: May 9, 2013 (Thursday)

Time: 2:30 - 3:30pm

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