THE UNIVERSITY　　　　**OF HONG KONG**

Institute of Mathematical Research
Department of Mathematics

GEOMETRY SEMINAR

Deformation theory for log canonical brackets with an open T-leaf

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Abstract

Starting with a log canonical Poisson bracket that is invariant under an action of an algebraic torus T, I will describe its T-invariant Poisson deformations. The key assumption is the presence an open T-leaf, which generalizes the concept of log-symplecticity from the case of trivial T to the more general setup. I will deduce the existence of the "canonical maximal" Poisson deformation, which sort of uses up all available first-order deformations. I will demonstrate how this framework can be applied to recover the Elek-Lu formula for the Poisson bracket on Bott-Samelson varieties. This is joint work with Jiang-Hua Lu.

Date:	October 10, 2024 (Thursday)
Time:	4:00 – 5:00pm
Venue:	Rm 210, Run Run Shaw Bldg., HKU

All are welcome