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Representation and Number Theory Seminar

Hitchin Fibration and Commuting Schemes

by

Professor Tsao-Hsien CHEN University of Minnesota

Abstract:

The commuting scheme of a reductive Lie algebra has always been of great interest in Lie theory and Invariant theory but it was only recent that it appears as a primordial object in the study of the Hitchin fibration for higher dimensional varieties. I will explain how the invariant theory for the commuting scheme, in particular the Chevalley restriction theorem for the commuting scheme, is used in the study of Hitchin fibration and the proof of the Chevalley restriction theorem in the case of symplectic Lie algebras.

The talk is based on joint work with Ngo Bao Chau.

Date : April 27, 2021 (Tuesday) Time : 9:00am – 10:00am (Hong Kong SAR) Zoom link : https://cuhk.zoom.us/j/97838822137?pwd=ZTVvSC9abmNjR3RCcS9FTzJNTVhXdz09 Meeting ID: 978 3882 2137 Passcode : sesame

All are Welcome