



THE HONG KONG UNIVERSITY OF SCIENCE & TECHNOLOGY

Department of Mathematics

PHD STUDENT SEMINAR

**Geometric construction of Shuffle Algebra acting
on Moduli Spaces of Stable Sheaves on Surfaces**

By

Mr. Zhongyi SHI

Abstract

Geometric representation theory contains various realizations of representation some infinite dimensional Lie algebras in geometric ways. In this talk we will introduce a geometric construction of representation of Hecke algebra realizing as action on K-theory groups of moduli spaces of stable bundles on smooth surfaces given by Andrei Negut, which is a generalization of Nakajima's results on Hilbert scheme of n points on affine plane. In his work, Negut introduces a way to understand the operators on K-theory groups without using equivariant settings.

Date : 6 May 2022 (Friday)

Time : 3:00pm

Zoom Meeting : <https://hkust.zoom.us/j/99010866815> (Passcode: 220506)

All are Welcome!