



THE HONG KONG UNIVERSITY OF SCIENCE & TECHNOLOGY

Department of Mathematics

ALGEBRA AND GEOMETRY SEMINAR

Equivariant derived category of a reductive group as a categorical center

by

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Abstract

There is a classical relationship between representations of the Iwahori-Hecke algebra associated with a Weyl group of a split reductive group G , defined over a finite field, and the (principal series) representations of the corresponding finite group of Lie type. I will discuss a categorification of this relationship in the context of various triangulated categories of constructible sheaves on the group G . In particular, I will present a new approach to connecting the categories of character sheaves to a version of a categorical center of the constructible Hecke category. Based on a joint work with R. Bezrukavnikov, A. Ionov, and Y. Varshavsky.

Date : 11 October 2023 (Wednesday)

Time : 3:00pm – 4:30pm

Venue : Room 5566 (Lifts 27/28)

Zoom : <https://hkust.zoom.us/j/95221420856> (Passcode: 390519)

All are Welcome!

Note: The talk will be delivered in person at room 5566 but will also be streamed over Zoom. Everyone is welcome to join us in person at Room 5566.