



THE HONG KONG UNIVERSITY OF SCIENCE & TECHNOLOGY

Department of Mathematics

ALGEBRA AND GEOMETRY SEMINAR

Endoscopy for affine Hecke category

by

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Abstract

Affine Hecke categories are categorifications of Iwahori-Hecke algebras, which are essential in the classification of irreducible representations of loop group LG with Iwahori-fixed vectors. The affine Hecke category has a monodromic counterpart, which contains sheaves with prescribed monodromy under the left and right actions of the maximal torus. We show that the neutral block of this monoidal category is equivalent to the neutral block of the affine Hecke category (with trivial torus monodromy) for the endoscopic group H . It is consistent with the Langlands functoriality conjecture.

Date : 19 September 2024 (Thursday)

Time : 4:30pm - 5:30pm

Venue : Room 5506 (Lifts 25/26)

All are Welcome!