

Northeastern University



Mathematics Department

Geometry, Physics, and Representation Theory Seminar

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Wednesday, January 31, 2:50-3:50 pm, Lake Hall 509

**Towards a categorification of a projection from an  
affine to a finite Hecke algebra in type  $A$**

**Abstract**

Work of Bezrukavnikov on local geometric Langlands correspondence and works of Gorsky, Negu, Rasmussen and Oblomkov, Rozansky on knot homology and matrix factorizations suggest that there should be a categorical version of a certain natural homomorphism from an affine Hecke algebra to a finite Hecke algebra in type  $A$ , sending basis lattice elements on the affine side to Jucys-Murphy elements on the finite side. I will talk about recent progress towards a construction of such a categorification in the setting of Hecke categories.