

Title: Embeddings of Kac-Moody affine Grassmannian slices and fundamental monopole operators

Abstract: Affine Grassmannians are objects of great importance in geometric representation theory, since their geometry encodes representation-theoretic information via the geometric Satake correspondence. We can capture the essential information via affine Grassmannian slices, which are transverse slices between strata in the affine Grassmannian.

The work of Braverman, Finkelberg and Nakajima provides an alternate realization of these affine Grassmannian slices, via Coulomb branches of 3d  $N=4$  quiver gauge theories. Crucially, their result allows us to define affine Grassmannian slices for arbitrary symmetric Kac-Moody types.

I will discuss joint work with Dinakar Muthiah, where we show that these Kac-Moody slices embed into one another, generalizing the usual finite-type situation. Our proof makes use of certain functions called *fundamental monopole operators*, which arise naturally from the physics perspective.