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**ALEX WEEKES**, University of British Columbia

*Deformations of affine Grassmannian slices*

Affine Grassmannian slices are interesting singular affine algebraic varieties: by the geometric Satake equivalence, their singularities are closely related to the representation theory of reductive groups. These varieties also arise as Coulomb branches for  $3d \mathcal{N} = 4$  theories by the recent work of Braverman-Finkelberg-Nakajima. They have Poisson structures, and are examples of conical symplectic singularities. Conical symplectic singularities have a nice deformation theory, by work of Namikawa, Losev and others. In the case of affine Grassmannian slices, I will describe how this deformation theory is related to the Beilinson-Drinfeld Grassmannian. This is work in progress with Gwyn Bellamy, Dinakar Muthiah and Oded Yacobi.