Lusztig slices and truncated shifted Yangians.

Lusztig slices are transverse slices to affine Schubert varieties in the affine Grassmannian of a reductive group $G$, which arise naturally in representation theory via the geometric Satake correspondence. We will discuss algebras called truncated shifted Yangians, which are quantizations of these slices. In particular we will describe the highest weight theory of these algebras using Nakajima’s monomial crystal. This leads to conjectures about categorical $g^L$-action (Langlands dual Lie algebra) on representation categories of truncated shifted Yangians. (Received September 20, 2015)