

Representation Theory, Geometry & Combinatorics Seminar

Organizer(s): M. Haiman, K. Reshetikhin, D. Hill & J. Sussan

Monday, 1:00–3:00pm, 939 Evans

12/8/2008 **Jon Brundan**, University of Oregon

Khovanov's Diagram Algebra, Grassmannians and the General Linear Supergroup.

I'll describe a slight enlargement of Khovanov's diagram algebra, and explain how it provides a combinatorial model both for the category of perverse sheaves on a Grassmannian and (in a limiting version) the category of rational representations of the general linear supergroup. This provides an explicit construction of the Koszul gradings on these categories, which is an important theme in representation theory.