Seminar on mirror symmetry and representation theory

Tuesday, April 25, 5:00-6:30, MIT, Room 2-132.

Triangulated categories of singularities and B-branes in Landau-Ginzburg models (continued)

by Rina Anno (Harvard).

Abstract. Let X be the affine space \mathbf{A}^N and W be a homogeneous polynomial of degree D. Then one can establish a relation between the triangulated category of graded B-branes in the Landau-Ginzburg model (X, W) and the bounded derived category of coherent sheaves on the hypersurface W = 0. This follows from a more general result involving graded triangulated categories of singularities $\mathbf{D}_{Sg}^{gr}(A)$ (for a Gorenstein algebra A) as an intermediate object. After Orlov's work math.AG/0503632.

Seminar contacts: Denis Auroux (auroux@math.mit.edu) Roman Bezrukavnikov (bezrukav@math.mit.edu) Rina Anno (rina@math.harvard.edu)