

Queen's Algebraic Geometry — Seminar —

EQUIVALENCES OF DERIVED CATEGORIES VIA GEOMETRIC \mathfrak{sl}_2 ACTIONS

JOEL KAMNITZER
University of Toronto

Abstract

I will discuss a new technique for constructing equivalences of derived categories of coherent sheaves. This allows us to construct in a natural way equivalences between the derived categories of sheaves on cotangent bundles to Grassmannians. Our work generalizes the spherical twists of Seidel-Thomas and is based on work of Chuang-Rouquier. This is joint work with Sabin Cautis and Anthony Licata.

Monday, September 8, 2008
4:30pm – 5:30pm
319 Jeffery Hall