

abstract

ALGEBRO-GEOMETRIC DERIVED CATEGORIES AND APPLICATIONS

Topic:

Speaker:

Affiliation:

Date:

Time/Room:

I will report on a work in progress joint with Andrei Okounkov. We extend the methods developed in an earlier work with Mirkovic and Rumynin on modular representations of semi-simple Lie algebras to representation of symplectic reflection algebras in type A. The method links it to geometry of the Hilbert scheme of points on the plane, and provides a description of a piece in Bridgeland's stability manifold of the latter. Following Bridgeland we expect this manifold to be closely related to quantum cohomology of the Hilbert scheme computed by Okounkov and Pandharipande.