Geometry, Topology and Dynamics Seminar

Group actions on quiver varieties and applications Victoria Hoskins (Freie Universität Berlin)

Abstract: In joint work with Florent Schaffhauser, we study two types of actions on King's moduli spaces of quiver representations over a field k, and we decompose their fixed loci using group cohomology in order to give modular interpretations of the components. The first type of action arises by considering finite groups of quiver automorphisms. The second is the absolute Galois group of a perfect field k acting on the points of this quiver moduli space valued in an algebraic closure of k; the fixed locus is the set of k-rational points, which we decompose using the Brauer group of k and give a moduli theoretic description. Over the field of complex numbers, we describe the symplectic and holomorphic geometry of these fixed loci in hyperkähler quiver varieties using the language of branes.

Monday, March 19 at 3:00 PM in SEO 636