

1040-14-137

Roman Bezrukavnikov* (bezrukav@math.mit.edu), 77 Massachusetts ave #2-284, Cambridge, MA 02139. *Cherednik algebra, Hilbert schemes and quantum cohomology.*

In a joint work with Finkelberg and Ginzburg we have linked representations of rational Cherednik algebras in positive characteristic to the geometry of Hilbert scheme of points on the plane. It appears that numerical invariants of representations are controlled by the quantum cohomology of the Hilbert scheme, computed by Okounkov and Pandharipande. This is joint work in progress with Okounkov. (Received January 30, 2008)