

December 13: Ivan Cherednik (UNC), *Jacobian factors in any ranks and DAHA*.

A generalization of compactified Jacobians and the Jacobian factors (their local factors indeed) from rank one to arbitrary ranks is of obvious importance. We will define Jacobian factors in any ranks, closely related to nil-elliptic affine Springer fibers (in type “A”) with non-reduced spectral curves, their germs to be exact. This definition is actually for any curve singularities but the connection to the DAHA superpolynomials (colored by columns) is only in the planar case. This connection and the simplicity of the definition (it is a stack, but quite explicit set-theoretically) indicate that a promising theory can be expected here. Joint with Ian Philipp.