

1135-05-446

David Jordan and **Monica Vazirani***, Department of Mathematics, One Shields Ave, Davis, CA 95616. *An elliptic Schur-Weyl construction of the rectangular representation of the DAHA.*

Building on the work of Calaque-Enriquez-Etingof, Lyubashenko-Majid, and Arakawa-Suzuki, Jordan constructed a functor from quantum D -modules on general linear groups to representations of the double affine Hecke algebra (DAHA) in type A . When we input quantum functions on $GL(N)$ the output is $L(k^N)$, the irreducible DAHA representation indexed by an $N \times k$ rectangle. For the specified parameters $L(k^N)$ is Y -semisimple, i.e. one can diagonalize the Dunkl operators. We give an explicit combinatorial description of this module via its Y -weight basis.

This is joint work with David Jordan. (Received September 04, 2017)