

1056-20-1061

Charles E Buehrle* (ceb405@lehigh.edu), Lehigh University, Department of Mathematics, 14 E. Packer Ave., Bethlehem, PA 18015. *Representations of the Iwahori-Hecke algebra of the symmetric group.*

We use new vanishing results on elements of the dual canonical basis of the quantum polynomial ring to construct representations of the Iwahori-Hecke algebra. We then show that these representations are equivalent to representations due to D. Kazhdan and G. Lusztig, except we can avoid the defining the Hecke algebra modules as quotients. (Received September 20, 2009)