

1100-16-262

**Briana Foster-Greenwood\*** (fostbria@isu.edu), Department of Mathematics, Idaho State University, 921 S. 8th Ave Stop 8085, Pocatello, ID 83209. *Hochschild Cohomology and Codimension Posets for Complex Reflection Groups.*

In the case of skew group algebras arising from representations of finite groups, one may exploit invariant theory and combinatorics to describe Hochschild cohomology governing deformations such as graded Hecke algebras. Focusing on skew group algebras of complex reflection groups, we present a comparison of absolute reflection length and codimension of fixed point spaces and use this combinatorial result to deduce information about cohomology structure. (Received February 09, 2014)