1131-16-276 Cathy Kriloff* (krilcath@isu.edu) and Briana Foster-Greenwood (brianaf@cpp.edu).

Deforming skew group algebras of dihedral and symmetric groups: Candidate representations.

Certain representations of reflection groups are natural candidates for constructing deformations of a skew group algebra. The deformations arising from Hochschild two-cocycles of polynomial degree at most one simultaneously generalize several types of algebras of interest in representation theory, algebraic combinatorics, and noncommutative geometry. They were termed Drinfeld orbifold algebras by Shepler and Witherspoon, who gave algebraic as well as cohomological conditions characterizing them. We explore the open question of which groups and representations yield such deformations by considering some representations of symmetric and dihedral groups for which we are able to classify resulting Drinfeld orbifold algebras. (Received July 17, 2017)