

MATHEMATICS COLLOQUIUM

Friday, December 7th @ 4:00

Physical Science Building, Room 308

Dr. Briana Foster-Greenwood

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DEFORMATIONS OF SKEW GROUP ALGEBRAS

Graded Hecke algebras were independently defined by G. Lusztig and V. Drinfeld in the 1980's and have since been rediscovered in orbifold theory as well as used to prove conjectures in representation theory and combinatorics. Graded Hecke algebras are examples of deformations of skew group algebras arising from the action of a finite group on a vector space. In this talk, we will highlight the role of classical invariant theory in computing cohomology that predicts potential deformations of skew group algebras. To illustrate ideas, we will classify the graded Hecke algebras arising as deformations of skew group algebras determined by the regular representation of a finite group

Refreshments in PS 317 at 3:30 PM