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**Anne V. Shepler\*** (ashepler@unt.edu), University of North Texas, Mathematics Department, Denton, TX 76203-5017, and **Sarah Witherspoon**. *Lie Orbifold Algebras and Graded Hecke Algebras*.

Graded Hecke algebras, symplectic reflection algebras, and rational Cherednik algebras are all noncommutative deformations of skew group algebras. What singles them out among all possible deformations? What related deformations deserve similar attention? For example, how might one complete the following analogy: Weyl algebras are to symplectic reflection algebras as universal enveloping algebras are to what? In this talk, we introduce a general class of deformations which completes this analogy and includes all the algebras mentioned above as special cases. We also discuss Poincare-Birkhoff-Witt properties. (Received August 30, 2011)