

1125-16-1621

Lauren Grimley* (lgrimley@shc.edu) and **Christine Uhl**. *Deformations of the skew group algebras of truncated quantum polynomial rings*. Preliminary report.

Deformations of an associative algebra are dictated by the Hochschild cohomology of that algebra. In this talk, we investigate the Hochschild cohomology of skew group algebras arising from a finite group action on truncated quantum polynomial rings, with a view towards deformations. We compare the cohomological conditions on deformations to the algebraic conditions of Poincare-Birkhoff-Witt deformations. By combining perspectives, we produce examples of truncated quantum Drinfeld Hecke algebras. (Received September 18, 2016)