1112-16-610 **Anne V Shepler***, ashepler@unt.edu, and **Sarah Witherspoon**, sjw@math.tamu.edu.

Deformations of group actions in positive characteristic.

Deformations of algebras built from groups acting on polynomial rings include symplectic reflection algebras, Drinfeld orbifold algebras, and graded affine Hecke algebras. A new class of deformation arises in the modular setting, when the characteristic of the underlying field divides the order of the acting group. We use a double complex adapted from Guccione, Guccione, and Valqui to give cohomological conditions for algebraic relations to define graded deformations analogous to those orginially crafted by Lusztig and Drinfeld. (Joint work with Sarah Witherspoon.) (Received August 11, 2015)