

1163-16-1121      **Padmini Veerapen\*** (pveerapen@tntech.edu), **Jason Gaddis** and **Xingting Wang**. *On Reflection Groups of the Homogenized  $n^{\text{th}}$  Weyl Poisson Algebra,  $H_n$* . Preliminary report.

In this talk, we will explore the work of Kirkman, Kuzmanovich, and Zhang, on rigidity of graded regular algebras and discuss applications to the homogenized  $n^{\text{th}}$  Weyl Poisson algebra. In particular, we examine the fixed ring of  $H_n$ , under a nontrivial group of automorphisms of  $H_n$ , and show that it is not isomorphic to  $H_n$  itself. That is, the homogenized  $n^{\text{th}}$  Weyl Poisson algebra is rigid. (Received September 14, 2020)