1139-16-282 Bach Nguyen* (bnguy38@lsu.edu), Kurt Trampel and Milen Yakimov. Discriminants of quantum groups at root of unity.

The notion of discriminant is an important tool in number theory, algebraic geometry and noncommutative algebra. However, discriminants are difficult to compute in concrete situations. This has been done for few noncommutative algebras, relying on direct calculations. We will present a formula for the discriminants of all quantized coordinate rings of simple algebraic groups at roots of unity. It is derived from a general method for computing noncommutative discriminants that relies on representation theory and Poisson geometry. (Received February 14, 2018)