

1162-16-233

Nicolas Andruskiewitsch, Ivan Angiono and Milen Yakimov* (yakimov@math.lsu.edu),
Department of Mathematics, Louisiana State University, Baton Rouge, LA 70808. *Poisson
geometry of large quantum groups.*

In this talk we will address the classification of irreducible representations of the Drinfeld doubles of the distinguished pre-Nichols algebras associated to finite dimensional Nichols algebras of diagonal type (large quantum groups in short). This is a large class of Hopf algebras which are module finite over their centers. It includes all quantum supergroups at roots of unity as special cases. On each of them we construct a structure of Poisson order in the sense of De Concini-Kac-Procesi and Brown-Gordon. Unlike the previous arguments for quantum groups at roots of unity which used low rank computations, our constructions are based on general arguments with dualities between specializations of integral forms of Hopf algebras and Poisson geometric arguments. (Received September 01, 2020)