
CRIS NEGRON, Massachusetts Institute of Technology
Small quantum groups associated to Belavin-Drinfeld triples

For a simple Lie algebra L of type A, D, E, I will explain how any Belavin-Drinfeld triple on the Dynkin diagram of L produces a collection of Drinfeld twists for Lusztig's small quantum group $u_q(L)$. These twists give rise to new finite-dimensional factorizable, ribbon, Hopf algebras. For any Hopf algebra constructed in this manner, I will discuss how one can read off the group of grouplike elements, identify the Drinfeld element, and describe the irreducible representations of the dual from the given Belavin-Drinfeld triple.