1116-16-2686   **Jesse S Levitt*** (`jlevit3@lsu.edu`) and **Milen Yakimov**. *Classifying connected Hopf algebras of finite GK-dimension via finite Drinfeld quantizations.*

The classification problem for Hopf Algebras of finite GK dimension has attracted a lot of interest in recent years. We will describe a new perspective to it via deformation theory. In 1983 Drinfeld constructed quantizations of all triangular r-matrices. We expand on work of Etingof and Gelaki showing that the ones that are finite define connected Hopf algebras of finite GK dimension. Hopf algebras constructed in this way are isomorphic, as algebras, to universal enveloping algebras. This construction recovers almost all of the known connected Hopf algebras of finite GK dimension, leads to many new examples from the general point of view of quasi-Frobenius Lie algebras, and enables preexisting Lie theoretic classification results to be brought to bear on the question at hand. (Received September 22, 2015)