

Meeting: 1001, Evanston, Illinois, SS 24A, Special Session on Hopf Algebras at the Crossroads of Algebra, Category Theory, and Topology

1001-08-342 **Jacob Towber*** (jtowber@uic.edu), 3521b Church Street, Skokie, IA 60203. *Application of the Fadeev-Reshetikhin-Taxhtajan construction to produce new finite-dimensional quasitriangular Hopf algebras which are not equivalent via cocycle twisting.* Preliminary report.

Finite-dimensional quasi-triangular Hopf algebras are of some interest in low-dimensional topology. A procedure will be explained, which produces a rather large collection of such, in a rather explicit way (via generators and relations.) These are not isomorphic to each other, or to the earlier constructions (via replacing q by roots of unity in the well-known Drin'feld-Jimbo-Lusztig constructions)—indeed, are not equivalent even if cocycle twists are allowed.

These results represent joint work with Sarah Westreich. (Received August 31, 2004)