

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

1001-16-56 **Suemi Rodriguez-Romo** (suemi@servidor.unam.mx), CIT-FESC, Universidad Nacional Autonoma de Mexico, Apdo. Postal 142, 54750 Cuautitlan Izcalli, Mexico, Mexico, and **Earl J. Taft*** (etaft@math.rutgers.edu), Department of Mathematics, Rutgers University, Piscataway, NJ 08854-8019. *A Left Quantum Group.*

Starting with roughly half the relations of $SL_q(2)$, we construct a left quantum group, i.e., one with a left antipode but no right antipode. The left antipode constructed is not an algebra antimorphism, but does reverse the order on irreducible monomials, which form a basis. In fact, none of the infinite number of left antipodes is an algebra antimorphism. (Received July 28, 2004)