1039-16-36 Earl J. Taft* (etaft@math.rutgers.edu), Department of Mathematics, Rutgers University, Piscataway, NJ 08854-8019. The boson-fermion correspondence and one-sided quantum groups.

In the last few years, A. Lauve, S. Rodriguez-Romo, and E. J. Taft have constructed some left quantum groups, i.e., bialgebras generated by comatrix units, which have a left antipode but no right antipode. This turns out to be related to a recent quantization of the boson-fermion correspondence from classical physics which has been obtained by various people. We shall explain this relationship. (Received February 21, 2008)