Chun-Ju Lai* (cjlai@uga.edu), Department of Mathematics, Boyd Graduate Studies Research Center, University of Georgia, Athens, GA 30602, and Daniel K. Nakano and Ziqing Xiang. A coordinate coalgebra construction of q-Schur duality of type B.

In this talk we investigate the $q$-Schur algebras of type B that were constructed earlier using coideal subalgebras for the quantum groups of type A. We present a coordinate coalgebra construction that allows us to realize these $q$-Schur algebras as the duals of the d-th graded components of certain graded coalgebras. Such a realization allows us to relate the representation theory of the type B $q$-Schur algebras with the representation theory of the associated quantum symmetric pairs. (Received January 18, 2019)