1030-16-4 **David E Radford*** (radford@uic.edu), Department of Mathematics, Statistics, and, Computer Science, SEO 322 (m/c 249), 851 S. Morgan, Chicago, IL 60607-7045. *Representations of Pointed Hopf Algebras.*

The quantized enveloping algebras and small quantum groups fall into natural classes of pointed Hopf algebras. Determining the structure of the Hopf algebras of these classes, work of Andruskiewitsch and Schneider, has essentially been completed.

The structure of these pointed Hopf algebras suggests a blueprint for studying their representation theory. A big component of this study is a construction of representations of a class of algebras from pairs of characters. This theory accounts for a parameterization of the finite-dimensional irreducible modules of these pointed Hopf algebras, as well as for quantum doubles, in many cases. Representation results are from joint work with Schneider. (Received August 07, 2007)