

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

1001-16-148      **Leonid Krop\*** (lkrop@condor.depaul.edu), Department of Mathematical Sciences, DePaul University, 2320 N.Kenmore Ave., Chicago, IL 60614, and **David E Radford**. *Parametrization of simple modules for the Quantum double of Frobenius-Lusztig kernels.*

The underlying Hopf algebra  $H$  is the central quotient of Lusztig's algebra  $\mathbf{u}_\zeta(D)$ . There  $\zeta$  is a root of unity and  $D$  stands for a Dynkin diagram. For  $D$  of type  $A_n$  both  $H$  and  $H^*$  contain distinguished subalgebras isomorphic as algebras to the group algebra of group  $G$  equal to the direct product of a finite number of cyclic groups. In this talk we discuss parametrization of simple modules for the Quantum (Drinfel'd) double of  $H$  in terms of characters of  $G \times G$ . Previous related work consists of the Curtis-Lusztig's theorem on parametrization of simple  $\mathbf{u}_\zeta(D)$ - modules and some recent results of D. Radford and the presenter on Quantum doubles of factorizable Hopf algebras. The talk is joint work with D. Radford. (Received August 21, 2004)