1083-16-153 Garrett Johnson* (johnsongw@cua.edu) and Christopher Nowlin (cnowlin@gmail.com). Quantum Affine Schubert Cells and FRT-Bialgebras.

The aim of this talk is to draw connections between certain quantum Schubert cell algebras and universal FRT-bialgebras. The universal bialgebra construction of Faddeev, Reshetikhin, and Takhtajan is an approach to obtaining a q-deformation of the coordinate ring of regular functions on an algebraic group G. On the other hand, a quantum Schubert cell algebra $\mathcal{U}_q^+[w]$ associated to an element w in the Weyl group of a simple Lie algebra \mathfrak{g} is a deformation of the universal enveloping algebra $\mathcal{U}(\mathfrak{n}_+ \cap w.\mathfrak{n}_-)$. We show that certain multi-parameter quantum affine Schubert cells, and quotients thereof, map isomorphically onto certain distinguished subalgebras of FRT-bialgebras. This is joint work with Christopher Nowlin. (Received August 26, 2012)