

*Department of Mathematics,  
University of California, San Diego*

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# **University of California Lie Theory Workshop**

## **Prof. Sarah Witherspoon**

Texas A & M University

## **Quantum groups and pointed Hopf algebras**

### **Abstract:**

Each of the traditional finite quantum groups is associated to a Lie algebra, and therefore has at its heart a Dynkin diagram. A recent classification by Andruskiewitsch and Schneider shows that the seemingly much larger class of finite dimensional pointed Hopf algebras is not so different: Each such Hopf algebra has at its heart a collection of linked Dynkin diagrams from which its structure is largely determined.

In this talk, we will give an overview of the classification and the current state of knowledge about these pointed Hopf algebras, including a finite generation result in cohomology.

Host: Efim Zelmanov

## **Monday, February 18, 2008**

### **11:10 AM**

### **NSB 1205**

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