## ALGEBRA SEMINAR

## Primitive deformations of quantum p-groups, Part 1

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ABSTRACT: In this series of two talks, I will discuss the classification of finite-dimensional Hopf algebras in positive characteristics. A technique called primitive deformation will be introduced in order to study the isomorphism classes of these Hopf algebras. As an application, connected Hopf algebras of dimension  $p^i$  with  $i \leq 3$  are now completely classified. Further questions concerning the cohomology theory and gauge equivalence for many newly discovered Hopf algebras in positive characteristics will also be discussed. This is a joint work with Linhong Wang and Van Nguyen.

Monday, March 18, 2016 1:30 – 2:30 pm Room 617, Wachman Hall Department of Mathematics