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Van C. Nguyen* (v.nguyen@northeastern.edu), Department of Mathematics, Northeastern University, Boston, MA 02115, and **Xingting Wang**. *On the structures of Hopf algebras in prime characteristic.*

The goal of this talk is to present some recent progress in the classification of finite-dimensional Hopf algebras, over any algebraically closed field of prime characteristic $p > 0$. In particular, we discuss the classification of pointed p^3 -dimensional Hopf algebras H , focusing on the cases when H is pointed but is not connected nor a group algebra. Structures of Nichols algebras over p -groups in characteristic p as well as non-primitively generated braided Hopf algebras over C_p occur in this work. Our results provide many new examples of (parametrized) non-commutative and non-cocommutative finite-dimensional Hopf algebras in positive characteristic. Necessary background will be given. (Received September 16, 2016)