1163-16-1205   **Siu-Hung Ng*** (`rng@math.lsu.edu`). *On Hopf algebras of prime dimensions.*

A Hopf algebra of prime dimension p over an algebraically closed field $\Bbbk$ of characteristic zero was proven to be isomorphic to a group algebra by Zhu. The same result was established by Etingof and Gelaki when the characteristic q of $\Bbbk$ is greater than p. However, if $\Bbbk$ is of characteristic p, there are three isomorphism classes of Hopf algebras of dimension p. It is more surprising that the technique for the classification of Hopf algebras of dimension pq over $\mathbb{C}$ reincarnated in the classification of Hopf algebras of dimension p over $\Bbbk$ of characteristic q when $p < 4q$. In this talk, we discuss some background and approach of this result. The talk is based on a joint work with Xingting Wang. (Received September 15, 2020)