1116-VA-2818   **Van C. Nguyen*** (`v.nguyen@neu.edu`), Northeastern University, and **Linhong Wang** and **Xingting Wang**. *Complete classification of connected prime-cube dimensional Hopf algebras.* Preliminary report.

For finite dimensional Hopf algebras, their classifications over $\mathbb{C}$ (e.g. in characteristic 0) has been investigated for decades with many fruitful results, but their structures in positive characteristic have remained elusive. We provide a complete classification of connected Hopf algebras of dimension p^3 over an algebraically closed field k of prime characteristic $p > 0$. Many new Hopf algebra examples arise from our classification results. (Received September 22, 2015)