1146-16-202   **Martin Lorenz** and **Bach Nguyen***, nguyen.bach@temple.edu, and **Ramy Yammine**. *Action of Hopf algebras and noncommutative prime spectra.*

Let H be a Hopf algebra, and A be any associative unital algebra. Suppose A is a left H-module algebra. Then the spectrum of A admits a stratification with its strata indexed by H-prime ideals of A. Using this stratification to study A was initiated by K. Goodearl and E. Letzter, then M. Lorenz, where they considered group actions. In this talk, we will discuss a generalization of their results to the setting of cocommutative Hopf algebra, where the H-strata can be described in term of the prime spectrum of certain commutative algebra. This is a joint work with M. Lorenz and R. Yammine. (Received January 22, 2019)