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Martin Lorenz, Bach Nguyen and **Ramy Yammine*** (tug09286@temple.edu), 1805 N Broad St, Wachman Hall 517, Philadelphia, PA 19122. *Actions of cocommutative Hopf algebras.*

We will discuss certain ring-theoretic aspects of the action of a cocommutative Hopf algebra H on an arbitrary algebra A . In the case where the base field is algebraically closed, we show that a special type of H -action, that we call integral, yields a natural stratification of the spectrum of the algebra A in terms of the prime spectra of certain commutative algebras. When the base field has characteristic 0, we also show that the prime radical of A is stable under any action of H . (Received January 26, 2019)