1108-16-287 **Ryan Kinser*** (ryan-kinser@uiowa.edu) and **Chelsea Walton** (notlaw@math.mit.edu). *Hopf* actions on path algebras.

There is a notion of a Hopf algebra acting on another algebra which generalizes the classical notion of a group acting on an algebra by automorphisms. We classify (by explicit formulas) the Hopf actions of Taft algebras on path algebras of loopless, Schurian quivers. Then, we apply this to give some actions of the Frobenius-Lusztig kernel $u_q(\mathfrak{sl}_2)$ and Drinfeld doubles of Taft algebras on path algebras. (Received January 16, 2015)