1165-16-237 **Ana Elena Berrizbeitia*** (aberrizbeitia@coloradomesa.edu), Colorado Mesa University, 1100 North Avenue, Wubben Hall and Science Center, 134L, Grand Junction, CO 81501-3122.

Invariants of Hopf actions on path algebras of quivers.

Invariant theory has its roots in groups acting on algebraic varieties, where the goal is to describe the polynomial functions that are fixed by the group action. A classic question in the study of group actions is whether the invariant ring is finitely generated, and if so, can we find a nice description for a minimal set of generators. Actions, however, are not limited to group actions, and in this talk, we will show under which circumstances a Hopf Algebra, namely a Taft Algebra, can act on the path algebra of a quiver, extending the work of Kinser and Walton published in 2016. Furthermore, given an action where the group like element $g \in T(n)$ acts transitively on Q_0, we provide a description of the invariant ring of the action. (Received January 18, 2021)