Zachary Cline* (zcline@temple.edu). Extending actions to the Drinfel’d double of various Hopf algebras “close” to Taft algebras. Preliminary report.

Susan Montgomery and Hans-Jürgen Schneider classified all non-trivial $n$-dimensional module algebras $A$ over the Taft algebras $T_n(q)$ of dimension $n^2$, $n > 2$. They further showed that each such module structure extends uniquely to make $A$ a module algebra over the Drinfel’d double of $T_n(q)$. We examine if a similar phenomenon occurs for Hopf algebras “close” to the Taft algebras in various directions, and their module algebras. (Received February 03, 2018)