

1131-16-122

Robert Won* (wonrj@wfu.edu), **Jason Gaddis** and **Daniel Yee**. *Discriminants of Taft algebra smash products and applications.*

We study the smash product $A\#H$ where H is a Taft algebra acting on A a quantum plane or quantum Weyl algebra. We determine when the center of $A\#H$ is the fixed ring A^H . We then compute the discriminant of $A\#H$ over its center and apply it to compute the Azumaya locus and restricted automorphism group of $A\#H$. (Received July 10, 2017)