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**Jason Gaddis, Robert Won and Daniel Yee\*** (dyee@fsmail.bradley.edu). *Center of Taft Algebra Smash Products.*

Given the  $n^2$ -dimensional Taft algebra  $H$  and an  $H$ -module algebra  $R$ , we determine the center of the smash product  $R\#H$  under certain conditions. We apply this result to computing the discriminant, an automorphism invariant, of  $A\#H$ , where  $A$  is the skew polynomial algebra or the quantum Weyl algebra. (Received January 29, 2018)