Drake M Harmon* (dharmon2@fau.edu), Timothy J Ford and Djordje N Bulj. Generically Trivial Azumaya Algebras on a Rational Surface with a Non-rational Singularity.

Elementary examples are presented of normal algebraic surfaces $X$ with singular points $x$ such that at the local ring $O_{X,x}$ there exist Azumaya algebras of all orders in the Brauer group that are split by the field of rational functions on $X$. These algebra classes correspond to elements of torsion in the class group of the henselian local ring $O_{X,x}^h$. The surfaces $X$ are affine normal rational and the singularities $x$ are non-rational. (Received September 08, 2012)