1116-11-2184 Anthony Várilly-Alvarado and Bianca Viray* (bviray@uw.edu). Uniform bounds on Brauer classes of certain K3 surfaces. Preliminary report.

Let X be a K3 surface over a number field k. It is well known that the Brauer group of $X_{\overline{\mathbb{Q}}}$ is isomorphic to $(\mathbb{Q}/\mathbb{Z})^{\rho}$ with $1 \leq \rho \leq 19$. In contrast, Skorobogatov and Zarhin showed in 2008 that the quotient Br X/Br k is always finite. We consider the problem of whether #(Br X/Br k) is bounded by a constant depending only on the number field k and the geometric Picard group of X. (Received September 22, 2015)