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Sarah Frei* (sarah.frei@rice.edu) and **Anthony Várilly-Alvarado**. *Reductions of Brauer classes on a K3 surface.*

For a K3 surface over \mathbb{Q} of Picard rank 1, it is well-understood that the Picard rank jumps upon reduction modulo a prime. This jumping in the Picard rank is countered by a drop in the size of the Brauer group. In this talk, I will report on joint work with Anthony Várilly-Alvarado, in which we consider the following natural question: Given a non-trivial Brauer class on a K3 surface over \mathbb{Q} of Picard rank 1, how often does this class become trivial upon reduction modulo various primes? (Received September 15, 2020)