

A way to study rational points on a variety is by looking at their image in the p -adic points. Bright and Newton have proven that for K3 surfaces defined over number fields primes with good ordinary reduction play a role in the Brauer–Manin obstruction to weak approximation.

In this talk, I will give an explicit example of this phenomenon. In particular, I will exhibit a K3 surface defined over the rational numbers having good reduction at 2, and for which 2 is a prime at which weak approximation is obstructed.