

1145-11-1640

Lori D. Watson* (ldwatson@uga.edu) and **Pete L. Clark.** *Hasse Principle Violations of Quadratic Twists of Hyperelliptic Curves.*

A curve C/\mathbb{Q} is said to violate the Hasse Principle if C has points over every completion of \mathbb{Q} , but not over \mathbb{Q} itself. Conditionally on the *abc* conjecture, we show that if a hyperelliptic curve C/\mathbb{Q} is given by an affine model $y^2 = f(x)$ where f is a polynomial of even degree > 6 with integer coefficients and no rational roots, then there are many quadratic twists of C violating the Hasse Principle. (Received September 23, 2018)