

Abelian varieties with everywhere good reduction over certain real quadratic fields of small discriminant

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Let $F = \mathbb{Q}(\sqrt{D})$, where $D = 53, 61$ or 73 . There is a simple abelian surface A/F with everywhere good reduction.

Under GRH, we show that every abelian variety with everywhere good reduction defined over F is isogenous to a power of A . This result extends previous work of Fontaine and Schoof.