

Reduction of Abelian varieties and curves

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Let K/K_0 be a finitely generated regular extension of fields of transcendence degree at least 2. We construct a Dedekind domain R that contains K_0 with $\text{Quot}(R) = K$ and prove that key properties of abelian varieties and smooth geometrically integral projective curves over K are preserved under reduction modulo \mathfrak{p} for almost all $\mathfrak{p} \in \text{Spec}(R)$.