

Singular del Pezzo Surfaces that are Equivariant Compactifications

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Abstract

We determine which singular del Pezzo surfaces are equivariant compactifications of \mathbb{G}_a^2 , to assist with proofs of Manin's conjecture for such surfaces. Additionally, we give an example of a singular quartic del Pezzo surface that is an equivariant compactification of $\mathbb{G}_a \times \mathbb{G}_b$.