

ARITHMETIC OF DEL PEZZO SURFACES OF DEGREE 1: ERRATUM

ANTHONY VÁRILLY-ALVARADO

I turned the thesis into two papers: [VA08] and [VA09]. The erratum below was incorporated into the latter paper.

Page 11. The surfaces of Theorem 1.5.4 are not smooth, and hence they are not del Pezzo surfaces. The conclusion of the theorem, however, still holds, as does its proof. I discovered this problem while trying to address a suggestion of Brendan Hassett: to classify all isotrivial rational elliptic surfaces (with section) that give rise to del Pezzo surfaces of degree 1. The answer to this question is both somewhat surprising and beautiful: they correspond precisely to the surfaces of Theorem 1.5.3; see [VA09, Proposition 3.1]. For this reason, when I turned Chapter 3 of the thesis into [VA09], I decided to recast the results in terms of isotrivial rational elliptic surfaces. See §§1–3 of [VA09] for more details.

REFERENCES

- [VA08] A. Várilly-Alvarado, *Weak approximation on del Pezzo surfaces of degree 1*, Adv. Math. **219** (2008), no. 6, 2123–2145. ↑(document)
- [VA09] ———, *Density of rational points on isotrivial rational elliptic surfaces* (2009). Submitted. ↑(document)