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ERRATUM TO "INFINITE FINITELY GENERATED FIELDS ARE BIINTERPRETABLE WITH $\mathbb{N}$"

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There is a serious error in the proof of Theorem 3.1, and hence, also of the main theorem of [1]. In the first paragraph of page 903 it is claimed that the class of maps of curves $C' \to C_{k'}$ as k' ranges through the degree dividing d extensions of k and the map $C' \to C_{k'}$ also has degree dividing d may be encoded by an $\mathcal{L}$-definable set. As justification, the Riemann-Hurwitz formula is invoked to bound the genus of such a C', but no argument is adduced to bound the ramification and in the constructions used in the proof no such bound is possible. I do not know an alternate argument for Theorem 3.1.

As such, Pop's Conjecture remains an open question.

References

[1] T. Scanlon, Infinite finitely generated fields are biinterpretable with $\mathbb{N}$, *J. Amer. Math. Soc.* **21** (2008), no. 3, 893 – 908. MR2393432 (2009f:12009)

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