

ERRATA:
ℓ-ADIC IMAGES OF GALOIS FOR ELLIPTIC CURVES OVER \mathbb{Q}

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This note gives errata for the article *ℓ-adic images of Galois for elliptic curves over \mathbb{Q}* [1].

- (1) Table 9, section 11: The totals listed in the "SW" line of the first part of Table 9 are incorrect due to double counting 312435 elliptic curves of prime conductor that are included in two parts of the Stein–Watkins database. The Stein–Watkins database contains all elliptic curves over \mathbb{Q} of absolute discriminant at most 10^{12} that have c_6 -invariant of absolute value at most $1.44 \cdot 10^{12}$ whose conductor N meets either of the following criteria (which are not mutually exclusive): (1) $N \leq 10^8$, (2) $N \leq 10^{10}$ is prime.

The corrected counts in the first part of the table are:

SW 35585316 3671438 181222 43966 2048 7444 368 1024 97776484 136789294

The counts in the second part of the table are the same (none of the double-counted curves are non-surjective at more than one prime).

- (2) Proposition A.6: the final phrase should be "conductor dividing N " (not "character of modulus N ").

REFERENCES

- [1] Jeremy Rouse, Andrew V. Sutherland, and David Zureick-Brown, *ℓ-adic images of Galois for elliptic curves over \mathbb{Q}* , appendix with John Voight, Forum Math. Sigma **10** (2022), e62.