

ERRATUM TO “HEEGNER CYCLES AND p -adic L -FUNCTIONS”

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Theorem 6.3: The statement should read

$$\dim_F \text{Sel}(K_{p^n}, V_{f,\chi}) = \frac{(1 - \epsilon(V_{f,\chi}))}{2} \cdot [K_{p^n} : K] + e.$$

Lemma 7.5: We have to assume further L/\mathbb{Q}_p to be unramified in the lemma in order to use Fontaine-Laffaille theory, and we do not know if this lemma holds when L/\mathbb{Q}_p is ramified. This lemma was used in Prop. 7.6 and Prop. 7.8 to conclude the Kolyvagin’s derivative classes satisfy the local condition at p , which one can instead use Perrin-Riou’s theory to verify. The proof of this fact is given in a work of Kobayashi and Ota [KO, Lemma 5.7].

Lemma 7.10: “...be a p -ramified extension..” should read “be ap -ramified abelian extension...”.

The explanation after Lemma 7.10 is revised in the latest version of this paper.

REFERENCES

- [KO] Shinichi Kobayashi and Kazuto Ota, *Anticyclotomic main conjecture for modular forms and integral Perrin-Riou twists*, preprint, 32 pp.