

ADDENDA AND ERRATA

RAF CLUCKERS

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★ Please email me at Raf.Cluckers@univ-lille.fr if you find errors in my papers not yet documented below.

- Addendum to [1].

- In the proof of Proposition 5.2 of [1], the correct reference is to Theorem 5.6 of [16] (instead of Theorem 5.5 of [16]).

- Errata to [2].

- In Proposition 2.6, the polynomials F_i are in $n + 2$ variables (instead of in $n + 1$ variables).
- In Proposition 4.3.3, the condition “irreducible” on $h(f)$ should be replaced by the condition “absolutely irreducible”. Indeed, this is used in the proof when saying that there are at most $d(d - 1)$ lines L in the direction of v (for the directional derivative not to vanish identically). At every use of this Proposition 4.3.3 in the paper, this extra condition of absolutely irreducibility for $h(f)$ is already satisfied. The same correction should be made to Proposition 7.1 of [Marcelo Paredes, Román Sasyk, *Uniform bounds for the number of rational points on varieties over global fields*, ANT, 2022].
- In Proposition 4.3.4, the upper bound $cd^{14}B$ for $N_{\text{aff}}(f, B)$ should be $cd^{18}B$. Indeed, in the proof of Proposition 4.3.4, δ can be at most d times the expression from (4.3.1) (this factor d is forgotten in the reasoning). The exponent 18 has been picked up correctly in Proposition 7.3 of [Marcelo Paredes, Román Sasyk, *Uniform bounds for the number of rational points on varieties over global fields*, ANT, 2022].
- In Lemma 4.3.7, the degree should be $(n+1)d(d^2-1)$ instead of $(n+1)(d^2-1)$. The corresponding correction should be made in Lemma 7.5 of [Marcelo Paredes, Román Sasyk, *Uniform bounds for the number of rational points on varieties over global fields*, ANT, 2022].
- Remark 4.3.8 should be changed according to the corrected versions of Proposition 4.3.4 and Lemma 4.3.7.

- Addendum to [3] and [7].

- In Remark 2.1.16 of [5], an additional reduction argument is explained that was used but not made explicit in [3] and [7].

- Erratum to [4].

- In [4], there are two alternative definitions given for cones with multiplicities and it is claimed that they are equivalent, namely the equality of $CM_0^\Lambda(X)$ and $SC_0^\Lambda(X)$ in Section 5.4 of [4]. In fact, they are not equal in general, and, only $CM_0^\Lambda(X)$ should be used throughout [4] (and not $SC_0^\Lambda(X)$), as noted in Section 6.1 of [17]. Even with this corrected definition, the final part of Theorem 3.6.2 of [4] remains unproved as far as we know, and Proposition 2.4.2 of [4] is wrong as stated, as noted in Section 6.1 of [17]. We thank Arthur Forey for pointing this out to us.

- Errata to [6].

- In Lemma 5.1.3, Proposition 5.1.4 and Theorems B and 5.2.2 of [6], for L of characteristic zero, the dependence of the bounds on the degree ν of L over \mathbb{Q}_p is forgotten. This is explained in [10].
- On line 8 in Section 1.2 there is a typo: t should be send to ϖ_L instead of to φ_L .

- Erratum to [8].

- In Proposition 4.1 of [8] one should add the extra condition on the coefficients $c_{a,b,i,j}$ that they are non-torsion whenever $a \neq 0$.

- Errata to [9].

- A smoothness condition is missing in Proposition 4.3.1 of [9]; this smoothness condition is made explicit and explained in Remark 6.6 of [1].
- In Definition 2.1.1 of [9], the norm is missing in the numerator of the difference quotient.

- Addenda to [11].

- In [12, Remark A.1.8], a correction to Theorem 4.5.15 of [11] is made. Namely, it is noted that the order symbol $<$ should be part of the language $\mathcal{L}_{\mathcal{A}}$ in Definition 4.5.14 to make the statement of Theorem 4.5.15 correct.
- In [12, Remark A.1.9], it is explained that one of the two proofs given for the quantifier elimination statement of Theorem 6.3.7 of [11] is incomplete, and this proof is completed in Remark A.1.9. One proof uses compactness, and, the other proof is more classical and follows the line of quantifier elimination results going back to [15] and [19]. We thank Silvain Rideau for pointing this out to us.
- In Definition 4.1.2(ii) of [11], it should be added that $A_{m,n}$ is closed under permutation of the ξ -variables and also under permutation of the ρ -variables. Similarly, in Definition 4.3.1(ii) of [11], it should be added that A_m is closed under permutation of the ξ -variables. In Definition 3.1.1 of [11] it is optional to add it or not (the results of the paper are correct without adding the stability under permutation of the variables). Note that in [12, Definition 3.1.2(ii)], the stability under permutation is already explicitly mentioned, and hence, no correction is needed.

- Addendum to [13].

- In the whole paper [13] the base field k is assumed to be of characteristic zero. This should have been made more explicit, but is implicitly clear from the context and used results.
- Addendum to [14].
 - In Definition 3.3 of [14], the power series F has to converge on an open neighborhood of the **closure** of the image of φ . This word ‘closure’ should be added, in line with previous preparation results as in [18] [21], [20].

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CNRS, UNIV. LILLE, UMR 8524 - LABORATOIRE PAUL PAINLEVÉ, F-59000 LILLE, FRANCE,
AND, KU LEUVEN, DEPARTMENT OF MATHEMATICS, B-3001 LEUVEN, BELGIUM

Email address: Raf.Cluckers@univ-lille.fr

URL: <http://rcluckers.perso.math.cnrs.fr/>