

Here are the known misprints/errors (from my and some other papers) and some amplifications for the book ‘Cyclotomic Fields and related topics’. Sorry about them! If you find any corrections, not listed here, or have any other comments for improvement, I will be grateful to receive those.

**Misprints which are non-obvious and may confuse reader are in bold face.**

1. (Quadratic and Cyclotomic Fields article) Pa. 37, 3rd paragraph, 4th line: ‘ $b^2$ ’ should be dropped.
2. (Quadratic and Cyclotomic Fields article) Pa. 38, 2nd para. ‘otherwise..’ argument deals only with norm 1 units, in case of norm -1, again we get similar contradiction by adding/subtracting conjugates). In the last but one para.,  $a/q - b$  should be  $a/b - q$ .
3. (Quadratic and Cyclotomic Fields article) Pa. 39, 3rd para., 5th line, ‘cube of an ideal’ should better be ‘cube of a principal ideal’.
4. (Quadratic and Cyclotomic Fields article) Pa. 40, 2nd para. Another easy argument is that only  $p$  is ramified, and thus in the quadratic subfield the discriminant is divisible by only  $p$ , thus the sign is fixed by noting that the discriminant is congruent to zero or one mod 4.
5. (Quadratic and Cyclotomic Fields article) Pa. 41, In the factorization claim (and may be elsewhere too) one should assume  $n$  is not congruent to 2 modulo 4. (Note that if  $n$  is odd,  $-\zeta_n$  is  $\zeta_{2n}$ ).
6. (Quadratic and Cyclotomic Fields article) Pa. 43, third para. 2nd line.  $K^+ = Q(\zeta_n)^*$  should be  $K^+ = Q(\zeta_n)^+$ .
7. (An introduction to L-functions) Pa. 123, in paragraph after warning, euler factor at  $p$  is missing describing values of  $\zeta_p(s)$  and the same problem in congruences of Theorem 12.1 on pa. 125.
8. (On a theorem of Hasse-Minkowski) Pa. 127, line 3, the words ‘of degree 2, (with coefficients in)  $K$  and’ are missing after ‘polynomial  $f$ ’.
9. (On a theorem of Hasse-Minkowski) Pa. 132, theorem 8, line 3,  $K$  should be  $L$ .

10. (On a theorem of Hasse-Minkowski) Pa. 133, para. 4. Case I. It is wrong to say ‘obviously can not be zero’, as  $\lambda_i$  can be zero for  $i = 1, 2$ . (Thanks to Sean Hiwe for pointing this out).

Correction: In the subcase, when it is non-zero, we are done as explained. In the second subcase, when it is zero, we can finish similarly by taking a non-zero value of  $\langle a_1, a_2 \rangle$  and representing its negative by isotropic (since  $f$  is isotropic, by the condition of this subcase) and thus universal  $\langle a_3, a_4, \dots \rangle$ .

One small gap in this nice exposition is that standard fact that isotropic implies universal is used but not explained. Here is the proof: Let  $f$  be the quadratic form, with  $B$  the corresponding bilinear form. Isotropic means there is  $X_1 \neq 0$  with  $B(X_1, X_1) = 0$ . Choose  $Y_1$  such that  $B(X_1, Y_1)$  non-zero by nondegeneracy. Then  $f(X_1 + tY_1) = B(X_1 + tY_1, X_1 + tY_1) = tB(X_1, Y_1) + B(Y_1, Y_1)$  takes all values in the field as  $t$  takes all values the field.

11. Pa. 166, para.4 line 6, modulo 3, when  $p=3$  should be modulo 9 when  $p=3$ .
12. Pa. 167, para. of proof of second case:  $\gamma$  should be  $\delta$ .
13. Pa. 169, 3rd para. from bottom, last line  $\mathcal{O}_L^*$  should be  $\mathcal{O}_L - \{0\}$ .
14. pa. 328 paragraph last but one,  $p = 2$  is misprint for  $a_p = 2$ .