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Correction to the paper "An effective order of Hecke–Landau zeta functions near the line $\sigma = 1$, I"

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There is a misprint in the formulation of Lemma 8 for principal character, $\chi = \chi_0$, on p. 189. The dependence of the constant A_{15} on $N\mathfrak{f}$ is omitted. The correct formulation of the second part of Lemma 8 is as follows:

LEMMA 8 (second part). *Denote by* $\mu(\mathfrak{b})$ *the generalized Möbius function and write* $\alpha_K = \operatorname{res}_{s=1}\zeta_K(s)$. *If* χ *is the principal character,* $\chi = \chi_0$, *then*

$$\left| H(x, \chi_0) - \alpha_K X \sum_{\mathfrak{b}|\mathfrak{f}} \frac{\mu(\mathfrak{b})}{N\mathfrak{b}} \right| \leqslant A_{15} X^{1-2/(n+1)}$$

where $A_{15} = n^{c_6 n} d^{2/(n+1)} \ln^{2n} d \cdot (N\mathfrak{f})^{1/(n+1)}$ *and* c_6 *is a numerical constant.*

The result of the next Lemma 9 on the same page 189 is misinterpreted in the case of principal character. Lemma 9 should be corrected as follows:

LEMMA 9 (for $\chi = \chi_0$). *In the region* $\sigma \geqslant 1 - 1/(n+1)$, $t > 1$

$$\Big|\zeta_K(s, \chi_0) - \sum_{1 \leqslant m \leqslant B_1 t^{n+1}} F(m, \chi_0) m^{-s}\Big| \leqslant B_1^{1-\sigma} c_7^n \ln^{n-1} d + B_2$$

where $B_1 B_2^{n+1} = n^{c_8 n(n+1)} d^2 \ln^{2n(n+1)} d \cdot N\mathfrak{f}$ *and* c_7 *and* c_8 *are numerical constants,* $F(m, \chi_0) = \sum_{N\mathfrak{a}=m} \chi_0(\mathfrak{a})$.

Moreover, on the same page 189, in the proof of Theorem 1, when $\chi = \chi_0$, we set $B_1 = n^{c_9 n^2} d \ln^{n(n+1)} d \cdot N\mathfrak{f}$ and from Lemma 9 we get the following estimate in the region $1 - 1/(n+1) \leqslant \sigma \leqslant 1$, $t > 1$:

$$|\zeta_K(s, \chi_0)| \leqslant \Big| \sum_{1 \leqslant m \leqslant A_{16} N\mathfrak{f} t^{n+1}} F(m, \chi_0) m^{-s}\Big| + n^{c_{10} n} d^{1/2} \ln^{2n} d \cdot N\mathfrak{f}^{1-\sigma} \tag{4.1}$$

where $A_{16} = n^{c_9 n^2} d \ln^{n(n+1)} d$.

It is easy to verify that these corrections do not change the final results in Theorems 1 and 2.

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