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## Erratum to “Harmonic Maass forms associated to real quadratic fields”

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In our previous paper [1], we obtained arithmetic information about the Fourier coefficients of harmonic Maass forms associated to Hecke weight one theta series. Regrettably, the denominator bound  $\kappa_m$  as stated in Theorems 1.1 and 6.5 is incorrect, and should be modified as follows.

In the last paragraph of the proof of Theorem 4.5, the denominator bound from [3, Theorem 4.7] is the square root of the size of the finite quadratic module  $L^*/L$ . Instead of  $\sqrt{AM}$  and  $N\sqrt{AM}$  as stated, these should be  $M\sqrt{D}$  and  $MN\sqrt{D}$ . From (4.2.12), we see that the denominator bound of the right hand side is then given by

$$\phi(N)N(M\sqrt{D})(NM\sqrt{D})(6AN') = 24A^3(N')^5 D\phi(N),$$

where we have applied Prop. 4.1 and the choice  $NM = 2A(N')^2$  in (4.2.3) to get the bound  $6AN'$ . Therefore, the constant  $\kappa_L$  in (4.2.7) should be  $24A^3(N')^5\phi(N)D$ , and can be chosen to divide  $24A^3M^5D\phi(2AM)$  when  $N = 2AM$  and  $N' = M$ . The same proofs then show that the constants  $\kappa$  in Theorem 5.1 and  $\kappa_m$  in Theorems 1.1 and 6.5 can be chosen as

$$\kappa = 48DM^5\phi(2M), \quad \kappa_m = 96DM^5\phi(2M).$$

Though the bound can be improved to  $48DM$  and  $96DM$  respectively (see [2]), the dependence on  $D$  is necessary, which was missing from [1].

### References

- [1] Charollois, P., Li, Y.: Harmonic Maass forms associated to real quadratic fields. J. Eur. Math. Soc. **22**, 1115–1148 (2020) [Zbl 07198104](#) [MR 4071323](#)
- [2] Li, Y., Schwagenscheidt, M.: Mock modular forms with integral Fourier coefficients. [arXiv: 2101.05583](#) (2021)
- [3] Scheithauer, N.: The Weil representation of  $SL_2(\mathbb{Z})$  and some applications. Int. Math. Res. Notices **2009**, 1488–1545 [Zbl 1244.11043](#) [MR 2496771](#)

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