Corrections in *Families of automorphic forms*

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1.3.2. In formula for G_k: $(nz+m)^{-k}$.

1.4.4. On p. 9 the remark on the singularities of the Eisenstein series is not correct. *The singularities are determined by the singularities of* $\Lambda(2s)=\pi^{-s}\Gamma(s)\zeta(2s)$ *and the zeros of* $\Lambda(2s+1)$. *At each singularity the principle part is again a modular form.*

2.2.1. On p. 28 definition of $\tilde N$ should read $\tilde N = \{n(x) \ : \ x\in\mathbb{R}\}\cong\mathbb{R}$.

2.3.6. The multiplier system for a given character χ is given by $\left(\begin{smallmatrix} a & b\\ c & d\end{smallmatrix}\right)\mapsto\chi\Bigl(\widetilde{\left(\begin{smallmatrix} a & b\\ c & d\end{smallmatrix}\right)}\Bigr)$.

4.2.6. Insert t in second display from botton on p. 53. The term with $h'(t)$ should be $\Bigl(2s+1-\bigl(\frac{n-l}{2}+2s+2\bigr)t\Bigr)h'(t)$.

4.2.9. … solution $f(u)\sim u^p$ as $u\downarrow 0$.

Furthermore, after the first display, one should use (13) of 6.4, and not (14) in the case $\varepsilon=-1$.[1]

Table 4.1, p.63. For $\pm\mathrm{Re}\, n>0$

$$\mathbf{E}^{\pm}\hat\omega_l(P,n,s)=2\bigl(\frac14(l\pm1)^2-s^2\bigr)\,\hat\omega_{l\pm2}(P,n,s)\,.$$

Lemma 6.2.7. Last line of proof: … norm $\|\cdot\|_{D,l\pm2}$.

9.1.4. In third paragraph too many gothic letters.

9.1.8. In first line $P=\tilde\Gamma_{\mathrm{mod}}\cdot\infty$.

13.1.2. In first line $U=\left(\begin{smallmatrix}1&1\\0&1\end{smallmatrix}\right)$.

13.1.5. First term in expression for $\log\eta$ should be $\frac{\pi i}{12}\,z$.

15.3.3. The value of ω is a factor 6 too large.

There is a problem with the relation between $\mathbf{x}$ and $\mathbf{y}$. If we define these quantities as in 15.3.1, then the relation should be $\mathbf{y}^2=4\mathbf{x}^3-\frac{4}{27}$. This leads in 15.3.3 to the relation

$$\frac{\omega}{2}=\int_{\tau=i}^{\infty}\frac{d\mathbf{x}(\tau)}{\mathbf{y}(\tau)}=\int_{y=0}^{\infty}\frac1y\,d\Bigl(y^2/4+1/27\Bigr)^{1/3}\,.$$

This implies

$$\omega=\frac{\sqrt{\pi}}{\sqrt3}\,\frac{\Gamma(1/6)}{\Gamma(3/2)}\,.$$

Additions to this list of corrections are welcome.

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[1]Thanks to Daniël van Dijk