

DAVID A. KAZHDAN

S. J. PATTERSON

Corrections to : “Metaplectic forms”

Publications mathématiques de l'I.H.É.S., tome 62 (1985), p. 203

[<http://www.numdam.org/item?id=PMIHES_1985__62__203_0>](http://www.numdam.org/item?id=PMIHES_1985__62__203_0)

© Publications mathématiques de l'I.H.É.S., 1985, tous droits réservés.

L'accès aux archives de la revue « Publications mathématiques de l'I.H.É.S. » (<http://www.ihes.fr/IHES/Publications/Publications.html>) implique l'accord avec les conditions générales d'utilisation (<http://www.numdam.org/conditions>). Toute utilisation commerciale ou impression systématique est constitutive d'une infraction pénale. Toute copie ou impression de ce fichier doit contenir la présente mention de copyright.

NUMDAM

Article numérisé dans le cadre du programme
Numérisation de documents anciens mathématiques
<http://www.numdam.org/>

CORRECTIONS TO:

METAPLECTIC FORMS

by D. A. KAZHDAN and S. J. PATTERSON

(Publications Mathématiques, 59 (1984), 35-142)

Unfortunately the argument on pp. 119-120 of this paper were carried out too hastily as was pointed out to us by T. Suzuki. The assertion $\langle \lambda_{\eta_v}, v_{0,v} \rangle = 0$ ($\eta \notin \tilde{H}_{*,v}$) is false which necessitates the following additional argument. For $v \notin S$ for which one has $|n|_v = 1$ and $\omega_{*,v} | \tilde{H}_{*,v} \cap K_v^* = 1$ we have to have for consistency

$$\sum_{\eta_v \in \tilde{H}_{*,v} \setminus \tilde{H}_v} \mathbf{c}_{S \cup \{v\}}(\eta \times \eta_v) \langle \lambda_{\eta_v}, v_{0,v} \rangle = \mathbf{c}_S(\eta).$$

By Theorem I.4.2 and Proposition I.2.4 the left-hand side is equal to

$$\mathbf{c}_{S \cup \{v\}}(\eta \times 1) (1 - q_v^{-1}) (1 - q_v^{-2}) \dots (1 - q_v^{-r}) / (1 - q_v^{-1})^r.$$

Thus we can define

$$\mathbf{c}(\eta) = \lim_{S \uparrow} \mathbf{c}_S(\eta) T(S)$$

where
$$T(S) = \prod_{\substack{v \in S \\ v \nmid \infty}} (1 + q_v^{-1}) (1 + q_v^{-1} + q_v^{-2}) \dots (1 + q_v^{-1} + \dots + q_v^{-(r-1)}).$$

The limit stabilises for large enough S . With this definition the formula of Theorem II.2.2 should read

$$\int_{N_{*,k}^* \setminus N_{*,A}^*} \bar{e}(n) \theta(n, f_0) dn = \lim_{S \uparrow} \sum_{\eta \in \tilde{H}_{*,A(S)} \setminus \tilde{H}_A(S)} \mathbf{c}(\eta) T(S)^{-1} \prod_{v \in S} \langle \lambda_{\eta_v}, f_{*,v} \rangle.$$

The same modifications should be made to Theorem II.2.3 and the discussion on p. 130. The second author would like to point out that the same applies to the survey « Whittaker Models of Generalised Theta Series » in *Sém. Théorie des Nombres de Paris 1982-1983*, Birkhäuser, 1984, pp. 199-232. This applies especially to § 4.7; the correction is already included in § 5.6.

The second author is compelled to admit that in this survey he was carried away by a now inexplicable bout of optimism; the conjecture proposed in § 6 cannot be true as stated. Nevertheless it does appear to be true when the functions on either side are restricted to an appropriately small subset of $\tilde{H}_A$ as T. Suzuki has kindly informed us.

Manuscrit reçu le 10 mai 1985.