

# Errata

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## 1 On the size of $p$ -adic Whittaker functions

Thanks to Dr. Michalis Neururer for pointing out most of the following issues.

**Equation (1.5):** The case of unramified Whittaker functions is well known and excluded here.

**Lemma 2.2:** For  $a(\mu\chi_j) \neq a(\mu\chi_i) = 0$  with  $\{i, j\} = \{1, 2\}$  and  $t \geq a(\mu\chi_j)$  we have

$$c_{t,l}(\mu) = \zeta_F(1)^{-1} q^{-\frac{t+a(\mu\pi)}{2}} \chi_i(\varpi^{t+a(\mu\pi)}) \epsilon\left(\frac{1}{2}, \mu^{-1} \omega_{\pi}^{-1} \pi\right) G(\varpi^{-l}, \mu^{-1}).$$

**Lemma 3.6:** We write  $\pi = \chi_1 | \cdot |^s \boxplus \chi_2 | \cdot |^{-s}$  and implicitly assume that  $\chi_1(\varpi) = \chi_2(\varpi) = 1$ . Then the case  $l = a(\chi_1) = a(\chi_2)$  and  $t > -2$  should read<sup>1</sup>

$$\begin{aligned} W_{\pi}(g_{t,l,v}) &= \chi_1(v)^{-1} \epsilon\left(\frac{1}{2}, \chi_1^{-1} | \cdot |^{-s}\right) \epsilon\left(\frac{1}{2}, \chi_1 \chi_2^{-1} | \cdot |^{2s}\right) q^{-\frac{t+a(\chi_1^{-1} \chi_2)+l}{2}-s(t+l)} \\ &\quad + \chi_2(v)^{-1} \epsilon\left(\frac{1}{2}, \chi_2^{-1} | \cdot |^s\right) \epsilon\left(\frac{1}{2}, \chi_1^{-1} \chi_2 | \cdot |^{-2s}\right) q^{-\frac{t+a(\chi_1 \chi_2^{-1})+l}{2}+s(t+l)}. \end{aligned}$$

**Remark 3.7:** Later it will turn out that all but maximally two of the integrals vanish. This can also be shown elementary see Remark 3.3.10 of my thesis.

**Lemma 4.1:**  $b_{\xi}$  should be  $b_{\chi}$ .

**Lemma 4.6:** The correct condition is  $0 \leq l_1, l_2 \leq k$ .

**Section 5:** Many of the omitted steps are actually technically involved. More detailed computations can be found in my thesis.

**Lemma 5.4:** Missing absolute values.

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<sup>1</sup>I thank Alexandros Groutides for pointing me towards this inaccuracy.