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**Erratum : “ $C^{-\infty}$ -Whittaker vectors for complex semisimple Lie groups, wave front sets, and Goldie rank polynomial representations”**

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## ERRATUM

### $C^{-\infty}$ -Whittaker vectors for complex semisimple Lie groups, wave front sets, and Goldie rank polynomial representations

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*Ann. scient. Éc. Norm. Sup.*, 4<sup>e</sup> série, t. 23, 1990, p. 311 à 367.

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In p355 line 5, I claimed the existence of a filtration  $1 \otimes S_w = L_q \subseteq L_{q-1} \subseteq \cdots \subseteq L_0 = E_p$  such that  $\bar{n}L_j \subseteq L_{j+1}$ . However, this statement is incorrect. A correct statement is : there exists a filtration  $1 \otimes S_w = L_q \subseteq L_{q-1} \subseteq \cdots \subseteq L_0 = E_p$  such that  $L_j/L_{j+1}$  ( $0 \leq j < q$ ) is equivalent to a quotient of  $S_w$ . Let  $B$  be the smashed product  $C[y, x] \# U(\bar{n})$  defined in 4.4. Then we can easily see the above filtration can be that of  $B$ -modules and  $L_j/L_{j+1}$  is equivalent to a quotient  $B$ -module of  $S_w$ . So, Theorem 4.1.1 is reduced to Lemma 4.3.16 and the following refinement of Lemma 4.3.17.

**Lemma**

Let  $\psi$  be a permissible character on  $\bar{n}$ . Let  $V$  be a  $B$ -submodule of  $S(\bar{U}_m/\bar{U}_m^w)'$ . Then we have

$$H^p(\bar{n}, (S(\bar{U}_m/\bar{U}_m^w)'/V) \otimes C_{-\psi}) = 0$$

for all  $p \in \mathbb{N}$  and  $w \in W_m^S - \{e\}$ .

The proof of the above lemma is just the same as that of Lemma 4.3.17.

At p361 line 24, in order to apply Nullstellensatz, we should regard  $y_0$  as a complex vector. It makes sense, since  $\psi' = \text{Ad}(e(y_0, 0)^{-1})\psi$  is permissible.

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