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ERRATA

"EXOTIC CHARACTERISTIC CLASSES AND SUBFOLIATIONS"

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Mémoire de Luis A. CORDERO et P.M. GADEA

We considered a differentiable manifold M equipped with a pair of foliations, F_1 and F_2 , and such that every leaf of F_2 is foliated by leaves of F_1 (briefly, F_1 is a subfoliation of F_2). As D.B. Fuks pointed out in MR 53 # 6584, corollary 5.2 is incorrect as the following counter-example shows: take an arbitrary foliation for F_2 and the foliation with one-point leaves for F_1 .

In fact, proposition 5.1 asserts the commutativity of the following diagram

$$\begin{array}{ccc}
 H^*(\hat{W}_1(J_1, J'_1)) & \xleftarrow{\bar{i}^*} & H^*(\hat{W}_2(J_2, J'_2)) \\
 \rho_{\nabla\tilde{\nabla}}^* \downarrow & \nearrow \rho_{\nabla, \tilde{\nabla}}^* & \downarrow \eta^* \\
 H^*(M; \mathbb{R}) & \xleftarrow{\bar{\rho}_{\nabla, \tilde{\nabla}}^*} & H^*(\hat{W}_2(\bar{J}_2, J'_2))
 \end{array}$$

where $\rho_{\nabla\tilde{\nabla}}^*$ and $\bar{\rho}_{\nabla, \tilde{\nabla}}^*$ are the characteristic homomorphisms for F_1 and F_2 respectively and $\rho_{\nabla, \tilde{\nabla}}^*$ is the characteristic homomorphism introduced in theorem 4.5; hence, a consequence of proposition 5.1 is simply

$$\text{Im } \rho_{\nabla, \tilde{\nabla}}^* \subset (\text{Im } \rho_{\nabla\tilde{\nabla}}^*) \cap (\text{Im } \bar{\rho}_{\nabla, \tilde{\nabla}}^*)$$

and this gives a topological obstruction to F_1 being a subfoliation of F_2 .