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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

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

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

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

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

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