

ANNALES DE L'INSTITUT FOURIER

LUIS A. CORDERO

P. M. GADEA

Errata : Exotic characteristic classes and subfoliations

Annales de l'institut Fourier, tome 26, n° 1 (1976), p. 1 (feuille volante)

http://www.numdam.org/item?id=AIF_1976__26_1_0_0

© Annales de l'institut Fourier, 1976, tous droits réservés.

L'accès aux archives de la revue « Annales de l'institut Fourier » (<http://annalif.ujf-grenoble.fr/>) 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/>

c.c.p. Lyon 723.30
tél. (76) 54.81.45

ERRATA

"EXOTIC CHARACTERISTIC CLASSES AND SUBFOLIATIONS"

Article paru dans le tome 26 (1976), fascicule 1, pp. 225-237

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 .