J. DIFFERENTIAL GEOMETRY
38 (1993) 463

ERRATUM TO "SUR LES STRUCTURES AFFINES HOMOTOPES À ZÉRO DES GROUPES DE LIE"

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In the proof of Theorem 5.2.1 in [3], I have used central composition series $F(G) = G_1 \subset \cdots G_k \subset \cdots \subset G$ with the property that for each Lie subgroup G_k occuring in $F(G)$ the restricted composition series $F(G_k) = G_1 \subset \cdots \subset G_k$ is central as well. It was Y. Benoist [1] who pointed out that this assumption, as well as the claim on p. 880, line 2, are rather extra hypotheses on the nilpotent Lie group G.

In contrast with the general statement in Theorem 5.2.1, Y. Benoist has discovered an 11-dimensional nilpotent Lie group in which the previous fact fails. Furthermore the Lie group discovered by Y. Benoist does not admit any left invariant affine structure (see [2]).

To correct the above claim, D should be replaced by an element of $\widehat{\mathscr{D}}_F^0(\mathfrak{G}) = \{D \in \mathscr{D}_F^0(\mathfrak{G})$ such that $F(\mathfrak{G}_D) = F(\mathfrak{G}) \subset \mathfrak{G}_D$ is a central composition series in $\mathfrak{G}_D\}$.

References

[1] Y. Benoist, private communication.
[2] ——, *Une nilvariétés non affine*, preprint.
[3] N. B. Boyom, *Sur les structures affines homotopes à zéro des groupes de Lie*, J. Differential Geometry **31** (1990) 859–911.

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