

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 $F(G) = G_1 \subset \dots \subset G_k \subset \dots \subset G$ with the property that for each Lie subgroup G_k occurring in $F(G)$ the restricted composition series $F(G_k) = G_1 \subset \dots \subset G_k$ 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 $\widehat{\mathcal{D}}_F^0(\mathfrak{G}) = \{D \in \mathcal{D}_F^0(\mathfrak{G}) \text{ such that } F(\mathfrak{G}_D) = F(\mathfrak{G}) \subset \mathfrak{G}_D \text{ is a central composition series in } \mathfrak{G}_D\}$.

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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