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ERRATUM TO: "ON THE DIMENSION OF THE STABILITY GROUP FOR A LEVI NON-DEGENERATE HYPERSURFACE" [ILLINOIS J. MATH. 49 (2005), 1155–1169]

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ABSTRACT. We point out two minor errors in our earlier paper.

It was erroneously stated in the proof of Theorem 1.1 in [EI] that conditions (1.1) imply that $C_{pq} = 0$ for p + q = 2 and p + q = 3 in formula (1.10). Apart from this statement, the proof of Theorem 1.1 is correct. In fact, conditions (1.1) only yield two relations for C_{pq} with p + q = 2 and a certain relation for C_{pq} with p + q = 3. These relations are bulky and are not shown here, but they do not imply in general that the above coefficients are all equal to zero. As a result, Corollary 1.2 does not follow from Theorem 1.1. In fact, each of the hypersurfaces listed in Theorem 1 of [L] provides a counterexample to this corollary for n = 2.

Furthermore, Corollary 1.4 to Theorem 1.3 is also incorrect. One of numerous counterexamples is given by the hypersurface

$$v = \langle z, z \rangle + u^3 |z_n|^4 + u |z_n|^4 \langle z, z \rangle^2.$$

This hypersurface is not locally CR-equivalent to the hypersurface (1.14) since it is not locally CR-homogeneous. Theorem 1.3 is correct as stated, but it does not in fact imply this corollary. We made an error similar to that described in the preceding paragraph while deriving the corollary from formula (1.12).

References

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