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Erratum: Aberrant CR structures

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There is an error in the paper [1]. It was asserted that the complex vector fields of equation (4.10) define a CR structure. In general, they do not. As a consequence Theorem 1 must be modified and Theorem 2 discarded.

Here is the correct version of Theorem 1. Condition (0.6) is the requirement that the Levi form has $n-1$ eigenvalues of one sign while the remaining eigenvalue is of the opposite sign.

Theorem 1 *Let the CR structure $\mathcal{C}$ on Ω satisfy Condition* (0.6)*. Then given any point p_0 of Ω, there is a CR structure $\tilde{\mathcal{C}}(p_0)$ in a neighborhood of p_0, also satisfying* (0.6)*, agreeing with $\mathcal{C}$ to infinite order at p_0 and such that the following is true*:

The differential at p_0 of every germ at p_0 of a CR function (*in the sense of $\tilde{\mathcal{C}}(p_0)$*) *of class C^1, vanishes.*

The existence of an aberrant system of vector fields is now an open question (except in three dimensions, see [2]).

References

[1] Jacobowitz H. and Treves F., *Aberrant CR structures*. Hokkaido Math. J. **12** (1983), 276–292.

[2] Jacobowitz H. and Treves F., *Nowhere solvable homogeneous partial differential equations*. Bull. AMS, (New Series) **8** (1983), 467–469.

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