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On the absence of the one-sided Poincaré lemma in Cauchy-Riemann manifolds

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Abstract. Given an embeddable CR manifold M and a non-characteristic hypersurface $S \subset M$ we present a necessary condition for the tangential Cauchy-Riemann operator $\bar{\partial}_M$ on M to be locally solvable near a point $x_0 \in S$ in one of the sides determined by S .

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