

Finite Jet Determination of CR-diffeomorphisms

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Abstract: Given two real-analytic holomorphically nondegenerate hypersurfaces M and M' in complex space and points $p \in M$ and $p' \in M'$ respectively, then any local real-analytic CR-diffeomorphism of M into M' sending p into p' is determined by a jet of some finite order at p . This result is true in any dimension and is an extension of the work by Ebenfelt, Lamel and Zaitsev for hypersurfaces in \mathbb{C}^2 .