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Robert Juhlin* (juhlin.3@nd.edu), Department of Mathematics, 255 Hurley Hall, Notre Dame, IN 46556-4618. *Finite Jet Determination of local real-analytic CR-diffeomorphisms.*

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 sending M into M' and p to 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 . We will present the main ideas of the proof and also discuss what is known about finite jet determination of smooth CR-diffeomorphisms. (Received February 14, 2006)