Meeting: 1000, Albuquerque, New Mexico, SS 2A, Special Session on Several Complex Variables and CR Geometry

1000-32-170 **Robert Juhlin*** (rjuhlin@math.ucsd.edu), Department of Mathematics, University of California, San Diego, La Jolla, CA 92093-0112. *Convergence of formal holomorphic mappings between real-analytic hypersurfaces.*

Let (M, p) be a germ of a real analytic hypersurface in $\mathbb{C}^N$ containing a complex hypersurface E going through p. We will further assume that the Levi-form vanishes (generically) to the first order along E. Our main result is that when $N = 2$ any formal invertible mapping taking (M, p) into another such hypersurface (M', p') is necessarily convergent.

The result generalizes to higher dimensions, under some further restrictions on the hypersurfaces. (Received August 23, 2004)