1108-32-36   **Xiaojun Huang** (`huangx@math.rutgers.edu`) and **Yuan Zhang*** (`zhangyu@ipfw.edu`). *CR transversality of holomorphic maps into hyperquadrics.*

Let M_ℓ and $\tilde{M}_\ell$ be smooth Levi-nondegenerate hypersurfaces of the same signature ℓ ($0 < \ell < \frac{n-1}{2}$) in $\mathbf{C}^n$ and $\mathbf{C}^N$ respectively with $3 \leq n \leq N$. In 2005, Baouendi and Huang conjectured that any holomorphic map F from M_ℓ into $\tilde{M}_\ell$ either sends an open neighborhood of M_ℓ in $\mathbf{C}^n$ into $\tilde{M}_\ell$, or is necessarily CR transversal everywhere. In this talk, we show the conjecture of Baouendi and Huang is true when $\tilde{M}_\ell$ is the standard hyperquadric H_ℓ^N of signature ℓ in $\mathbf{C}^N$ with $N - n < \frac{n-1}{2}$. Equivalently, we show that F is necessarily a local CR embedding from M_ℓ into H_ℓ^N. This is a joint work with Xiaojun Huang. (Received December 01, 2014)

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