1031-32-55 **Yuan Zhang*** (yuanz@math.rutgers.ede), Math Department, Rutgers, the State University of New Jersey, 110 Frelinghuysen Rd, Piscataway, NJ 08854-8019. *Rigidity and Holomorphic Segre Transversality for Holomorphic Segre Maps.*

Let $\mathcal{H}^n$ and $\mathcal{H}^N$ denote the complexifications of Heisenberg hypersurfaces in $\mathbf{C}^n$ and $\mathbf{C}^N$, respectively. We show that non-degenerate holomorphic Segre mappings from $\mathcal{H}^n$ into $\mathcal{H}^N$ with $N \leq 2n-2$ possess a partial rigidity property. As an application, we prove that the holomorphic Segre non-transversality for a holomorphic Segre map from $\mathcal{H}^n$ into $\mathcal{H}^N$ with $N \leq 2n-2$ propagates along Segre varieties. We also give an example showing that this propagation property of holomorphic Segre transversality fails when $N > 2n-2$. (Received July 31, 2007)