

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

1000-32-180 **M. S. Baouendi*** (sbaouendi@ucsd.edu), Department of Mathematics, 0112, UCSD, 9500 Gilman Dr., La Jolla, CA 92093-0112, and **Xiaojun Huang**. *Super-rigidity for holomorphic mappings between hyperquadrics of different dimensions*. Preliminary report.

We study holomorphic mappings sending a piece of a real hyperquadric in a complex space into a hyperquadric in a complex of a larger dimension. We show that these mappings possess strong super-rigidity properties when the hyperquadrics have positive signatures. These results are applied in the context of holomorphic mappings between classical domains in complex projective spaces of different dimensions. (Received August 24, 2004)