1067-58-1113 **E Cabral Balreira*** (ebalreir@trinity.edu), One Trinity Place, Department of Mathematics, San Antonio, TX 78212. *A Generalization of the Fujisawa-Kuh Global Inversion Theorem.* Preliminary report.

We discuss the global invertibility of nonlinear maps defined on the finite dimensional Euclidean space via differential tests and provide a generalization of the Fujisawa-Kuh Global Inversion Theorem. We also introduce a generalized ratio condition to establish when the pre-image of a certain class of linear manifolds is non-empty and connected. In particular, we provide conditions to detect global injectivity. (Received September 19, 2010)