



Speaker: Fred Xavier
University of Notre Dame

Friday, November 16, 2012
4:00 PM
231 Hayes-Healy Hall

Title: Invertibility of maps: from local to global

Abstract:

Under what conditions is a given locally invertible map actually globally invertible? This obviously important classical problem appears prominently in subjects as distinct as algebraic geometry and non-linear functional analysis. The aim of this introductory talk is to describe, by means of examples and prototypical arguments, the connections between the vibrant theory of global invertibility and several areas of mathematics, such as differential/algebraic geometry, dynamical systems, topology, complex analysis and non-linear analysis.