

Institute for Mathematics and its Applications
2011 Seminar Series: 10
University of Wollongong

Title: Study on infinitesimal rigid motions of euclidean submanifolds

Speaker: Fatemah Mofarreh (UoW)

Time and Date: 10:30am, Friday, September 16, 2011

Location: Room 24.203

Abstract: This study is concerned with the geometry of configuration space of similarity Rotational and Helical motions (equiform kinematics). For carrying out this investigation, we use the methods of vector calculus to do the computations. Finally qualitative study on the singularities of the motion is given through some of applications which are plotted and interpreted geometrically. We study also the linear variations on a surface representing the configuration space of an equiform motion in \mathbb{R}^3 . Then, the types of variations on a submanifold in \mathbb{R}^n are given. Special types of variations are studied and plotted.