



2009 - 2010



**MATHEMATICS COLLOQUIUM SERIES
UNIVERSITY OF CENTRAL FLORIDA**

**Dr. Xiaogang Su
Department of Statistics
University of Central Florida**

will speak on

**“Tree-Structured Subgroup Analysis: Understanding the Effect
of an Intervention Program for Breast Cancer Survivors”**

ABSTRACT: The Breast Cancer Education Intervention (BCEI) is a carefully tailored intervention program for improving the quality of life (QoL) of breast cancer survivors. The idea of recursive partitioning is borrowed to better understand the effect of BCEI and possibly make refinement. An interaction tree (IT) procedure is proposed to split the longitudinal data into groups that well delineate the heterogeneity of the intervention effect. The proposed procedure follows the convention of CART. The final IT tree structure helps identify groups in which the intervention is effective and groups where it is not. Besides, random forests of the interaction trees are used to extract important variables that interact with the intervention.

DATE: Thursday, November 5, 2009

TIME: 11:00am – 12:00pm

PLACE: MAP 318

Everyone is cordially requested to attend.