Workshop on

Multiple Imputation – Theory and Applications
presented by
Professor Jerry Reiter
Duke University

FINAL PROGRAM

PROGRAM CHAIR
Thomas Mathew, Professor, Department of Mathematics and Statistics, UMBC

1:30PM – 2:00PM REGISTRATION
LOBBY

2:00PM – 2:15PM WELCOME

• Nagaraj Neerchal, Chair, Department of Mathematics & Statistics, UMBC
• Bimal Sinha, Conference Chair, UMBC

2:15PM – 3:15PM LECTURE 1: Overview of Multiple Imputation

1.1 Problems caused by missing data
1.2 Various solutions and their limitations
1.3 Multiple imputation idea, including inference and data generation
1.4 Other adaptations of multiple imputation, including data confidentiality and measurement error

3:15PM – 3:30PM COFFEE BREAK

3:30PM – 4:30PM LECTURE 2: Implementing Multiple Imputation

2.1 Approaches to implementation, including multivariate modeling, conditional modeling, and machine learning based approaches
2.2 Checking adequacy of imputations via graphical display and posterior predictive checks
2.3 Demonstration on genuine examples

4:30PM – 4:45PM COFFEE BREAK
LECTURE 3: Advances in Multiple Imputation Methodology

3.1 Multiple imputation when records used for imputation are not used for analysis
3.2 Dealing with panel attrition using multiple imputation and refreshment samples
3.3 Multiple imputation for editing faulty data