Workshop on Small Area Estimation

University of Maryland Baltimore County (UMBC) ITE Building, Lecture Hall VII Friday, April 25, 2008 2:00 pm – 5:00 pm

Presented by Malay Ghosh, Distinguished Professor, University of Florida

Lecture 1. AN INTRODUCTION TO SMALL AREA ESTIMATION

- 1. Definition and Motivation
- 2. Examples
- 3. Synthetic and Composite Estimation (Without Auxiliary Information)
- 4. Synthetic and Composite Estimation (With Auxiliary Information)
- 5. Bayesian Interpretation of Composite Estimators

Lecture 2. RANDOM EFFECTS MODELS

- 1. Empirical BLUP and Empirical Bayes
- 2. Mean Squared Error Approximations
- 3. An Example-- Estimation of Median Income of Four-Person Families

Lecture 3. HIERARCHICAL BAYESIAN MODELS

- 1. Hierarchical Versus Empirical Bayes : A Comparison
- 2. An Illustrative Example
- 3. A Hierarchical Bayesian Model for Small Area Estimation
- 4. Estimation of Median Income of Four-Person Families : A Multivariate Model

Registration is free, but required! http://www.umbc.edu/circ/hosting/ProbStatDay2008/workshop.html

This event is sponsored by the UMBC Department of Mathematics and Statistics