

# Economics Seminar, Indian Statistical Institute, New Delhi

SPEAKER: Shalabh, IIT Kanpur

TITLE: Consistent Estimation of Regression Coefficients in Replicated Ultrastructural Model

DAY AND DATE: 3:30 PM, Thursday, 11th November, 2010

VENUE: Seminar Room 2, ISI Delhi

## ABSTRACT

Any statistical analysis assumes that all the measurements are correctly observed. In practice, this assumption may get violated and incorrect observations are obtained which are contaminated with measurement errors. The presence of measurement errors disturbs the optimal properties of classical statistical tools. The objective of the talk is to introduce the audience with the problem of measurement errors, modelling through linear regression and possible solutions related to the estimation of parameters in the set up of unreplicated as well as replicated observations. Other possibilities of constructing estimators using linear as well as non linear combinations of inconsistent estimators which can be used more easily in applications will also be discussed. The effect of not necessarily normally distributed measurement errors on the properties of the estimators in the framework of an ultrastructural model is another issue to be discussed.