



PhD SCHOOL IN STATISTICS
Department of Statistical Sciences

Specialist Course

XXV cycle

IDENTIFICATION AND INFERENCE IN MEASUREMENT ERROR MODELS

Aula Uggé

Schedule:

26	October	2010	10.00-12.00	A.R. Brazzale
27	October	2010	11.00-13.00	A.R. Brazzale
28	October	2010	10.00-12.00	A.R. Brazzale
03	November	2010	11.00-13.00	E. Battistin
04	November	2010	10.00-12.00	E. Battistin

Program:

www.stat.unipd.it/dottorato/scuola_corsi_2010

Identification and Inference in Measurement Error Models

A.R. Brazzale & E. Battistin
PhD School in Statistics, XXV cycle

Course Description

This course provides an introduction to the problem of measurement error. We will provide a quick overview of the most commonly used measurement error correction techniques in the framework of continuous and discrete response models, followed by a brief account of the newly developed methodology. We will focus on theory, but also give illustrations and indications of areas of application. The final intent is to have the doctoral students extend their previous and/or form a background knowledge and be prepared to deal with any kind of error in variables arising in statistical modelling.

Objectives

The objectives of this course are:

- to learn some of the traditional tools used for the correction of measurement error in continuous and discrete regression models;
- to get an account of recent measurement error correction techniques.

Schedule

26	october	2010	10.00–12.00	A.R. Brazzale	Introduction
27	october	2010	11.00–13.00	A.R. Brazzale	Continuous responses
28	october	2010	10.00–12.00	A.R. Brazzale	Discrete responses
03	november	2010	11.00–13.00	E. Battistin	Identification in linear models
04	november	2010	10.00–12.00	E. Battistin	Identification in non-linear models

Recommended text

Carroll, R.J., Ruppert, D. and Stefanski, L.A. (1995). *Measurement Error in Nonlinear Models*. Chapman & Hall, London.

Final Exam

The final exam consists in a reading group in the course of which the doctoral students are to present the methodology and results discussed in a pre-assigned recent publication. Date(s) will be announced.