



ATHENS UNIVERSITY OF ECONOMICS AND BUSINESS  
**Department of Statistics**

**Statistical Seminars**

**Title: “Shrinking bias to benefit estimation and inference in statistical models”**

**Speaker: Yiannis Kosmidis**, University College London

**Date: Thursday 18 April 2013**

**Time: 15.00-16.00**

**Room: A44**

**Abstract**

In this talk we present some recent work on a unified computational and conceptual framework for reducing the bias in the estimation of statistical models from a practitioners point of view. The talk will discuss several of the shortcomings of classical estimators (like the MLE) with demonstrations based on real and artificial data, for several well-used statistical models including Binomial and categorical responses models (for both nominal and ordinal responses) and Beta regression. The main focus will be on how those shortcomings can be overcome by reducing bias. A generic algorithm of easy implementation for reducing the bias in any statistical model will also be presented along with specific purpose algorithms that take advantage of specific model structures.