



Department of Decision Sciences

Statistics Seminar

Model selection for different purposes

Gerda Claeskens

K.U. Leuven

Thursday, 19 May 2011

12:00am Room 3-E4-SR03 Via Röntgen 1 Milano

Abstract

The selection of a suitable model, including the selection of regression variables, is central to any good data analysis. In the first part of this talk I will explain different criteria for model selection, such as AIC, BIC, with a deeper understanding of where they originate, what they intend to optimize, and how they should be understood and used. Next, I will consider a more directed model search for selecting a model that gives a good estimator of a 'focus'. This leads to the focussed information criterion. This criterion is discussed first in the setting with the number of variables small relative to the sample size, and next in a setting with a large number of variables. Data examples will be worked out and discussed.