



Department of Decision Sciences

Statistics Seminar

## Model selection in model-based cluster analysis

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Thursday, 29<sup>th</sup> October  
12:30pm Room 3-E4-SR03 Via Röntgen 1 Milano

### Abstract

I will describe different ways to compute or approximate the integrated completed likelihood criterion (ICL) devoted to select a relevant mixture model in a model-based clustering context. Different solutions will be considered: a BIC like approximation, a maximization of the expectation of the conditional classification likelihood and an exact derivation in a full Bayesian framework. The pros and the cons of the proposed ICL versions will be discussed from the statistical and numerical points of views.