

GENERAL ASSEMBLY OF THE SBS-BVS

Hasselt, 21 February 2008

The SBS-BVS annual General Assembly will take place at the University of Hasselt (Building D, Room H1), on Thursday 21 February 2008 at 17:00 hours. The election of eight Board members is one of the points on the agenda.

The General Assembly will be preceded by two scientific talks according to the following program:

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| 15:00 – 15:45 | <i>Outlier detection for skewed data</i>
Prof. dr. Mia HUBERT
Department of Mathematics – LStat, KULeuven |
| 15:45 – 16:30 | <i>Bayesian density estimation from grouped continuous data</i>
Prof. dr. Philippe LAMBERT
Institut des sciences humaines et sociales, ULg |
| 16:30 – 17:00 | Coffee break |

You are all cordially invited.

Abstracts:

Outlier detection for skewed data
Prof. dr. Mia HUBERT, Department of Mathematics – LStat, KULeuven

Most outlier detection rules for multivariate data are based on the assumption of elliptical symmetry of the underlying distribution. We propose an outlier detection method which does not need the assumption of symmetry and does not rely on visual inspection. Our method is a generalization of the Stahel-Donoho outlyingness. To allow skewness in the data, we adjust this measure of outlyingness by using a robust measure of skewness. We also construct an extension of the boxplot for bivariate data, in the spirit of the bagplot which is based on the concept of half space depth. Next, we show how this approach can be used to construct a robust PCA method for skewed data.

Bayesian density estimation from grouped continuous data

Prof. dr. Philippe LAMBERT, Institut des sciences humaines et sociales, ULg

Grouped data occur frequently in practice, either because of limited resolution of instruments, or because data have been summarized in relatively wide bins. We show how the composite link model can be combined with roughness penalties or equivalent priors to deliver an estimate of the underlying density and associated quantities. Simulation results and applications will be proposed.