



KATHOLIEKE UNIVERSITEIT LEUVEN

Statistics Seminar

Joint organization by
ORSTAT, Faculty of Business and Economics and the Statistics Research Group,
Faculty of Science
Leuven Statistics Research Center

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Self-modelling of functional curves

Thursday May 14, 2009

12:00—13:00

Location: Room HOG 03,101, Naamsestraat 69, Leuven.
Supporting research project: GOA-project 2007/04

Abstract:

When the multiple curves are observed, functional PCA is often carried out. However, this would not be an appropriate summary when the functional curves exhibit time variability. It is recommended to align the curves as a preprocessing step. Alternatively, the functional curves can be represented through shape invariant modelling approach. This approach takes into account features of time variability as well as amplitude variability. This is especially useful when features such as peak are of primary interest. We demonstrate the functional modelling approach with an econometric application called EPK (empirical pricing kernel) curves.