Part 2 of WORKSHOP 1(organized by the Institute of Statistics, UCL, Louvain-la-Neuve):

The second part of Workshop 1 was organized in May 2002, and consisted of a three-days <u>International Workshop</u>

on ``Statistical Modelling and Inference for Complex Data Structures", held on May 21-23, 2002, at Louvain-la-Neuve, followed by a <u>one-day meeting</u> on May 24, 2002 for all members of the network.

Both events took place at the Catholic University of Louvain.

The aim of this <u>international workshop</u> organised by the Institute of Statistics (UCL, Belgium) was to stimulate discussion about the state of the art of statistical modelling and inference for complex data structures.

During the International Workshop specialists in the areas of semi-and nonparametric modelling and inference

talked about recent developments. The workshop hosted 13 invited talks about various fields, such as, e.g., methodology and application of statistical methods in functional estimation, classification, time series analysis, survival analysis, Bayesian statistics and computational statistics, with applications to dependent data, in insurance, finance, biostatistics and economy. There were also two poster sessions. See the programme below.

This workshop was sponsored by Interuniversity Attraction Pole (Phase 5), Projet ARC 98/03-217 (Institut de statistique), Institut de Mathématiques Pures et Appliquées (UCL) and Fonds National de la Recherche Scientifique (FNRS). The

Organising committee consisted of Anestis Antoniadis (UJF, Grenoble), Noël Veraverbeke (LUC, Diepenbeek) and the local organizers Irène Gijbels, Philippe Lambert, Ingrid Van Keilegom and Rainer von Sachs (UCL).

About 120 people participated at this meeting that was anticipated as being a very succesful international meeting.

During the meeting the Institute of Statistics also celebrated its tenth anniversary. A ``Doctor Honoris Causa'' degree was awarded to Luc Devroye on May 21, 2002, in the afternoon.

Programme of the International Workshop:

List of INVITED SPEAKERS:

Anestis Antoniadis, Université Joseph Fourier, Grenoble, France. Luc Devroye, McGill University, Montréal, Canada. Paul Embrechts, ETH, Zürich, Switzerland. Jianqing Fan, Univ. of North Carolina, Chapel Hill, USA. Jürgen Franke, Universität Kaiserslautern, Germany. Peter Hall, Australian National University, Canberra, Australia. Nils Lid Hjort, University of Oslo, Norway. Marie Huskova, Charles University, Prague, Czech Republic. Gabor Lugosi, Pompeu Fabra University, Barcelona, Spain. Hans-Georg Müller, University of California, Davis, USA. David Scott, Rice University, Houston, USA.

Bernard Silverman, University of Bristol, UK. Noël Veraverbeke, Limburgs Universitair Centrum, Diepenbeek, Belgium.

Programme Tuesday May 21, 2002:

Time	Speaker	Title Invited Talk
9h30	Peter Hall	Relative efficiencies of kernel and local likelihood density estimators.
10h15		Coffee break
10h40	David Scott	Remarks on handling outliers in data and regression.
11h25	Gabor Lugosi	Consistency of boosting methods in classification.
12h30- 14h00		Lunch break: poster session 1
14h30- 15h30	Luc Devroye	Special invited talk : Combinatorial methods in density estimation.
15h30- 16h00		Coffee break
16h00		Ceremony Doctor Honoris Causa with reception

Programme Wednesday, May 22, 2002:

Time	Speaker	Title Invited Talk
9h30	Anestis Antoniadis	Optimal testing in functional analysis of variance models.
10h15		Coffee break
10h40	Hans-Georg Müller	Generalized functional linear models for curve data
11h25	Marie Huskova	MOSUM type procedures for detection of change.
12h30- 14h00		Lunch break: poster session 2
14h30	Jianqing Fan	Semi-parametric estimation of value-at-risk.
15h15		Coffee break
15h40	Jürgen Franke	Local nonparametric estimators for nonlinear time series.
16h25	Paul Embrechts	Modelling dependence in insurance and finance.
19h00		Conference dinner

Programme Thursday, May 23, 2002:

Time	Speaker	Title Invited Talk
9h30	Noël Veraverbeke	Partially informative censoring.
10h15		Coffee break
10h40	Nils Hjort	Frequentist model average estimators
11h25	Bernard Silverman	Empirical Bayes approaches to wavelet smoothing and other problems
12h10		Closing

Poster session 1: Tuesday, May 21, 2002:

L.M. Artiles-Martinez (EURANDOM, The Netherlands) and B.Y. Levit. Optimal design for minimax regression

Beirlant, J., Goegebeur, Y. (KUL, Belgium) and Planchon, V. (Gembloux, Belgium) Outlier detection of pedological data using extreme value methodology

T. Bouezmarni (UCL, Belgium) and O. Scaillet. Consistency of asymmetric kernel density estimators and smoothed histograms with application to income data

V. Delouille (UCL, Belgium). Second generation wavelet transform for irregularly spaced data in two dimensions

M. Denuit,, M. Mesfioui, J.M. Rolin and A. Tajar (UCL, Belgium) On the study of concordance measures and the construction of a discrete bivariate copula

D. Guégan and S. Ladoucette (Ecole Normale Supérieure de Cachan, France) Extremal behavior of particular non-linear processes

C.M. Hafner and J.V.K. Rombouts (UCL, Belgium). Semiparametric multivariate GARCH models

A. Komárek (KUL, Belgium), E. Lesaffre, D. Declerck and T. Härkänen. Effect of decayed deciduous teeth on eruption and caries on permanent teeth: a Bayesian analysis

T.A.H. Maatouk (University of Glasgow, UK) Nonparametric regression with interval data

E. Moons, M. Aerts (LUC, Belgium) and G. Wets. Tree based lack-of-fit test G. Rech (Electrabel, Belgium)

Modelling and forecasting economic time series with single hidden-layer feedforward autoregressive artificial neural networks

L. Yang and R. Tschernig (University of Maastricht, The Netherlands) Optimal rate multivariate local polynomial regression

Poster session 2: Wednesday, May 22, 2002:

F. Bevilacqua (St Anna School of Advanced Studies, Pisa, Italy) and C. Daraio. International parity relationships between Germany and US: a multivariate time series analysis for the post Bretton-Woods period

T. Brijs (LUC, Belgium), D. Karlis, G. Swinnen, K. Vanhoof and G. Wets. Tuning the multivariate Poisson mixture model for clustering supermarket shoppers

G. Claeskens (Texas A&M Univ., USA) and I. Van Keilegom. Confidence bands for regression curves and their derivatives

J. Collet (Université de Reims, France) and D. Guégan, Non Gaussian memory processes

A. Delaigle (UCL, Belgium). Estimation of endpoints in the deconvolution problem.

J.S. Dominguez-Menchero and M.J. Lopez-Palomo (University of Oviedo, Spain). Developments of nonparametric tests of the isotonic regression.

M. Hamers and M. Kohler (Universität Stuttgart, Germany). Nonasymptotic bounds on the L2 error of neural network regression estimates

N. Hens, M. Aerts (LUC, Belgium), G. Claeskens and G. Molenberghs. Non- and semi-parametric bootstrap imputation

A. Kremper (Philipps-University, Germany) and R. Eckhorn. Comparison of two methods for dimension reduction applied to neurophysiological data

D. Schäfer (Universität Stuttgart, Germany). Online-forecasting of stationary and ergodic Gaussian processes.

Van Bellegem, S. (UCL, Belgium). Adaptive estimation of wavelet spectra with application to forecasting.