

KNEMO'06 Scientific Programme

Sunday, September 3rd

- 18:00 – 20:00 ***Registration Desk*** opens at Villa Orlandi
- 19:00 ***Welcoming Cocktail*** in the Garden of Villa Orlandi

Monday, September 4th

- 8:00 ***Registration Desk*** opens at Villa Orlandi
- 8:30 – 8:45 ***Opening Ceremony***
- 8:45 – 10:15 ***KNEMO'06 Key-note Lectures***
Chairman: C. Lauro
- H. Bozdogan
A New Generation Mixture-Model Cluster Analysis Using Information Measure of Complexity and Genetic Algorithms
- J. Ramsay
Some Distinguishing Features of Functional Data Analysis
- E.J. Wegman
On the Extraction of Endogenous Metadata for Text and Image Databases
- 10:15-11:25 ***Contributed Papers Session 1***
Discrimination and Clustering Approaches
Chairman: T. Aluja
- N.T. Trendafilov
Simple and interpretable discrimination
- H. Wang, J. Meng
Predictive Modelling on Fisher Discriminant Function and its Application in Regional Economic Development Analysis of China
- T.V. Le, M. Lamure
A Pretopological Approach for Clustering

D. Húsek, H. Řezanková, A.A. Frolov
Overlapping Clustering Of Binary Variables

11:25 – 11:40 ***Coffee Break***

11:40 – 13:30 *Specialized Topics Session 1 (CLADAG Session)*
Extracting Information on Complex Data from Models
Organiser & Chairman: A. Montanari

M. Vichi
Models for Clustering Data: Least-Squares Fitting Approach

A. Montanari, C. Viroli
Dimensionally reduced mixtures of regression models

L. Grilli, C. Rampichini
Model building issues in multilevel linear models with endogenous covariates

A. Luati
Evaluating the properties of time series signal estimators by means of smoothing matrices

R. Rocci
Clustering Clusters

13:30 – 14:40 ***Lunch served in the Garden of Villa Orlandi***

14:40 – 15:40 *Invited Papers Session 1*
Model Selection and Assessment
Chairman: J. Antoch

C. Gatu, E.J. Kontoghiorghes, M. Hofmann, P. Yanev
Computational strategies for deriving the best subset regression model

G. Saporta, N. Niang
Model assessment

15:40-16:55

Contributed Papers Session 2

Time Series, Dynamic Data and Markov process

Chairman: M. La Rocca

A. Tsimpiris, D. Kugiumtzis

Clustering of Oscillating Dynamical Systems from Time Series Data Bases

E. Romano, G. Scepi

Integrating Time Alignment and Self-Organising Maps for Classifying Smoothed Time Series

V. Siersma, S. Kreiner

The use of graphical models to identify adequate models for dynamic treatment data

S.-H. Kim

Distribution, Interaction Graph, and Markovian Subgraph

16:55 – 17:10

Coffee Break

17:10 – 18:40

Invited Papers Session 2

Data Mining Solutions 1

Chairman: E. Wegman

D.A. Zighed, S. Marcellin and G. Ritschard

An asymmetric entropy measure for decision trees

A. Wilhelm

Exploratory modelling of personal characteristics in Key Visuals

F. Camillo, C. Liberati

The kernel approach in the future of data mining: many subjective choices in a complex landscape

Tuesday, September 5th

8:45 – 10:15 *Invited papers session 3*
Data Analysis Issues
Chairman: S. Azen

H.A.L. Kiers
Analyzing Component Loading Matrices or Doing Simultaneous Component Analyses?

E. Romano, R. Verde, Y. Lechevallier
Dynamical classification of functional data with free knots spline estimation

M. Imakor, L. Billard, E. Diday
PLS Symbolic Approach

10:15 – 11:25 *Contributed Papers Sessions 3*
PLS Regression, Path Modelling and Generalized Linear Models
Chairman: A. Morineau

A. Tenenhaus, A. Giron, G. Saporta, B. Fertil
Linear and Nonlinear Logistic Multinomial PLS regression

P. Bastien
Molecular predictor of survival based on linear and non linear kernel PLS-Cox regression

M.J. Lombardía, S. Sperlich
Semiparametric Inference in Generalized Mixed Effects Models

S. Balzano
PLS Path Modelling Multiblock Analysis for Measuring Performance: The case of the European Innovation Scoreboard

11:25 – 11:40 ***Coffee Break***

11:40 – 13:30

Specialized Session 2

PLS Path Modelling and Multilevel Models: Studying or Looking for a Group Structure

Organiser & Chairman: V. Esposito Vinzi

M. Tenenhaus, E. Mauger, Ch. Guinot

Use of SEM-ULS and SEM-PLS to measure interaction effect in a regression model relating two blocks of binary variables

L. Trinchera, S. Squillacciotti, V. Esposito Vinzi

PLS Typological Path Modelling: a model-based approach to classification

G. Sánchez, T. Aluja

PLS Path Modelling Segmentation in Job Motivational Analysis

R. Romano, F. Palumbo

Classification of structural equation models based on fuzzy regression

G. Vittadini, M. Sanarico,

The Cluster-Weighted Framework and the Multilevel Models

13:30 – 14:40

Lunch served in the Garden of Villa Orlandi

14:40 – 15:40

Invited Papers Session 4

Three-Way Clustering and Segmentation

Chairman: H.A.L. Kiers

H. Bacelar-Nicolau, F. Nicolau

On Three-Way Hierarchical Clustering Models

A. Tutore, R. Siciliano, M. Aria

ThreeWay Segmentation

15:40 – 17:10

Contributed papers session 4

Developments in Multivariate and Factor Analysis

Chairman: G. McLachlan

K. Katayama, A. Suzukaway, H. Minami, M. Mizuta
Linearly Restricted Principal Components in k Groups

L. La Tona, A. Alibrandi
Models for Hierarchical Structure Data: A Comparison between Nested ANOVA and Multilevel Models

P. Mascia
The Semi-Active Categories in Multiple Correspondence Analysis

M. Mezzetti
Bayesian Spatio-Temporal Factor Analysis

E. Tedesco, M. Giacalone
Multivariate Methods for the Evaluation of Public Administration on-line

17:10 – 17:25

Coffee Break

17:25 – 18:25

Invited Papers Session 5

Data Mining Solutions 2

Chairman: D. Zighed

D. Bruzzese, C. Davino
Significant Knowledge Extraction from Association Rules

A. Morineau, R. Rakotomalala
The TVpercent criteria to eliminate uninformative models among Association Rules

20:00

Gala Dinner

(Buses leave at 20:00 from Piazza Vittoria to the Faro of Punta Carena)

Wednesday, September 6th

8:45 – 10:45

Specialized Topics Session 3

The Analysis of Complex Biological Systems

Organiser & Chairman: M. Schimek

G. McLachlan

Clustering of Gene-Expression Profiles

D. Scott

Testing for Bimodality with Mixture Models

A. Kneip

On the Registration Problem

M. La Rocca, C. Perna

Modelling Complex Structures by Artificial Neural Networks

H. Wagner, S. Frühwirth-Schnatter

Model Selection Problems in State Space Modelling

J. Žižka

Machine Learning-Based Knowledge Extraction from the Acute-Leukemia Register ALERT

10:45 - 11:20

Contributed papers session 5

Model Choice

Chairman: G. Saporta

K.-E. Biebler, B. Jäger

Data Acquisition Strategies and Model Decision

T. Shimamura, H. Minami, M. Mizuta

Regularization Parameter Selection in the Group Lasso

11:20 – 11:30

Coffee Break

11:30 – 13:00

Contributed papers session 6
Applications of Statistical Methods and Models
Chairman: G. Scepi

J. Antoch, J. Machek, F. Mola
A Note on a Randomized Response Design

P. Cerchiello
Statistical methods for the identification of unknown Authors

L. Di Gennaro
*Household participation in international financial markets:
Empirical evidence from Italy*

W. Long, H. Feng, H. Wang
*Predictive Modelling of Large-scale Curves and Its Application on
GDP Prediction of Multi-regions*

D. Vistocco
*Comparing financial products through conditional mean and
conditional quantile models*

13:00 – 13:45

Final Discussion on:
“Knowledge Extraction & Modelling: what’s next?”
Moderator: C. Lauro

Discussants:
S. Azen, H. Bozdogan, H.A.L. Kiers, G. McLachlan, A. Morineau,
J.Ramsay, G. Saporta, M. Schimek, E.J. Wegman, D.A. Zighed

Schedule of the KNEMO'06 International Workshop

Time	Sunday, September 3 rd	Monday, September 4 th	Tuesday, September 5 th	Wednesday, September 6 th
8:45-10:15	Arrival of Participants	8:30 <i>Opening Ceremony</i> 8:45 <i>Key-Note Lectures</i> Bozdogan, Ramsay, Wegman	<i>Invited Papers Session 3</i> Data Analysis Issues	8:45-10:45 <i>Specialized Topics Session 3</i> The Analysis of Complex Biological Systems
10:15-11:25		<i>Contributed Papers Session 1</i> Discrimination and Clustering Approaches	<i>Contributed Papers Session 3</i> PLS Regression, Path Modelling and Generalized Linear Models	10:45-11:20 <i>Contributed Papers Session 5</i> Model Choice
11:25-11:40		<i>Coffee Break</i>		11:20-11:30 <i>Coffee Break</i>
11:40-13:30		<i>Specialized Topics Session 1</i> Extracting Information on Complex Data from Models	<i>Specialized Topics Session 2</i> PLS Path Modelling and Multilevel Models: Studying or Looking for a Group Structure	11:30-13:00 <i>Contributed Papers Session 6</i> Applications of Statistical Methods and Models
13:30-14:40		<i>Lunch</i>		13:00-13:45 Final Discussion
14:40-15:40		<i>Invited Papers Session 1</i> Model Selection and Assessment	<i>Invited Papers Session 4</i> Three-Way Clustering and Segmentation	
15:40-16:55		<i>Contributed Papers Session 2</i> Time Series, Dynamic Data and Markov Process	15:40-17:10 <i>Contributed Papers Session 4</i> Developments in Multivariate and Factor Analysis	
16:55-17:10		<i>Coffee Break</i>	17:10-17:25 <i>Coffee Break</i>	
17:10-18:40		Registration Desk opens at Villa Orlandi from 18:00 to 20:00	<i>Invited Papers Session 2</i> Data Mining Solutions 1	17:25-18:25 <i>Invited Papers Session 5</i> Data Mining Solutions 2
	19:00 Welcoming Cocktail in the garden of Villa Orlandi		20:00 Gala Dinner at Lido del Faro (Buses at Piazza Vittoria)	