

The workshop will bring together researchers interested in clustering techniques with applications in different fields, from economics to genetics through social sciences. It aims at creating a network of researchers interested in cluster analysis in order to reinforce the connection between FUB researchers and other national and international experts. The event is intentionally to favorite an effective interaction among participants and to promote formal as well as informal open discussions. The activity of the workshop will also support the scientific achievements of MODEX (Modelling Multivariate Dependence and Extremes) and "Multivariate analysis techniques based on copula function" projects, approved by the Central Research Committee of FUB.

## **WORKSHOP CLUSTERING METHODS AND THEIR APPLICATIONS**

**Friday, November 28th, 2014**

**Room C 3.06**

**8.30 a.m. – 6.00 p.m.**

**Faculty of Economics and Management  
Free University of Bozen - Bolzano  
Universitätsplatz 1 piazza Università  
39100 Bozen-Bolzano**

## Friday, 28 November, 2014

### 9.00 a.m. - 9.15 a.m. Opening of the Workshop

L. Courteau, Dean of the School of Economics and Management, Free University of Bozen-Bolzano, Italy  
F. Durante, Free University of Bozen-Bolzano, Italy

### 9.15 a.m. - 10.45 a.m. Session I

*Chair:* F. Marta L. Di Lascio, Free University of Bozen-Bolzano, Italy

#### "Flexible and Sparse Bayesian Model-Based Clustering"

Bettina Grün, Johannes Kepler University Linz, Austria

#### "Pursuing a formalization of the clustering problem. Answers (and questions) via modal clustering"

Giovanna Menardi, University of Padova, Italy

### 10:45 a.m. - 11:15 a.m. Coffee break

### 11.15 a.m. - 12.45 p.m. Session II

*Chair:* F. Durante, Free University of Bozen-Bolzano, Italy

#### "Identifying connected components in Gaussian finite mixture models for clustering"

Luca Scrucca, University of Perugia, Italy

#### "Functional Data Analysis and Cluster Analysis: a Marriage with some Constraints"

Simone Vantini, Politecnico of Milano, Italy

### 12.45 p.m.- 2.00 p.m. Lunch

### 2.00 p.m. - 4.15 p.m. Session III

*Chair:* E. Foscolo, Free University of Bozen-Bolzano, Italy

#### "Fuzzy segmentation in the postmodern era"

Marta Disegna, Free University of Bolzano-Bozen, Italy

#### "A toolbox for fuzzy clustering using the R programming language"

Maria Brigida Ferraro, University La Sapienza, Roma, Italy

#### "Cluster analysis of time series via Kendall distribution"

Roberta Pappadà, University of Trieste, Italy

### 4.15 p.m. – 4.30 p.m. Coffee break

### 4.30 p.m. – 6.00 p.m. Round table discussion

### 6.00 p.m. Conclusions

*Chair:* F. Durante and F. Marta L. Di Lascio, Free University of Bozen-Bolzano, Italy

## INFORMATION FOR PARTICIPANTS

Registration on the day starts at 08.30

The participation is free of charge.

All participants will receive a certificate of attendance, which will be distributed.

Participants are required to pre-register by sending an e-mail to:

**[katrin.lambacher@unibz.it](mailto:katrin.lambacher@unibz.it)**  
by Tuesday 25 November 2014

### Scientific Organization

F. Marta L. Di Lascio

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### Website:

[http://pro1.unibz.it/projects/Clustering\\_Methods\\_2014/](http://pro1.unibz.it/projects/Clustering_Methods_2014/)