Scientific Committee:

Anna Clara Monti (Chair), Fumiya Akashi, Marcella Corduas, Xiaoling Dou, Alessio Farcomeni, Luca Greco, Maria Iannario, Yan Liu, Simona Pacillo, Marco Riani, Masanobu Taniguchi.

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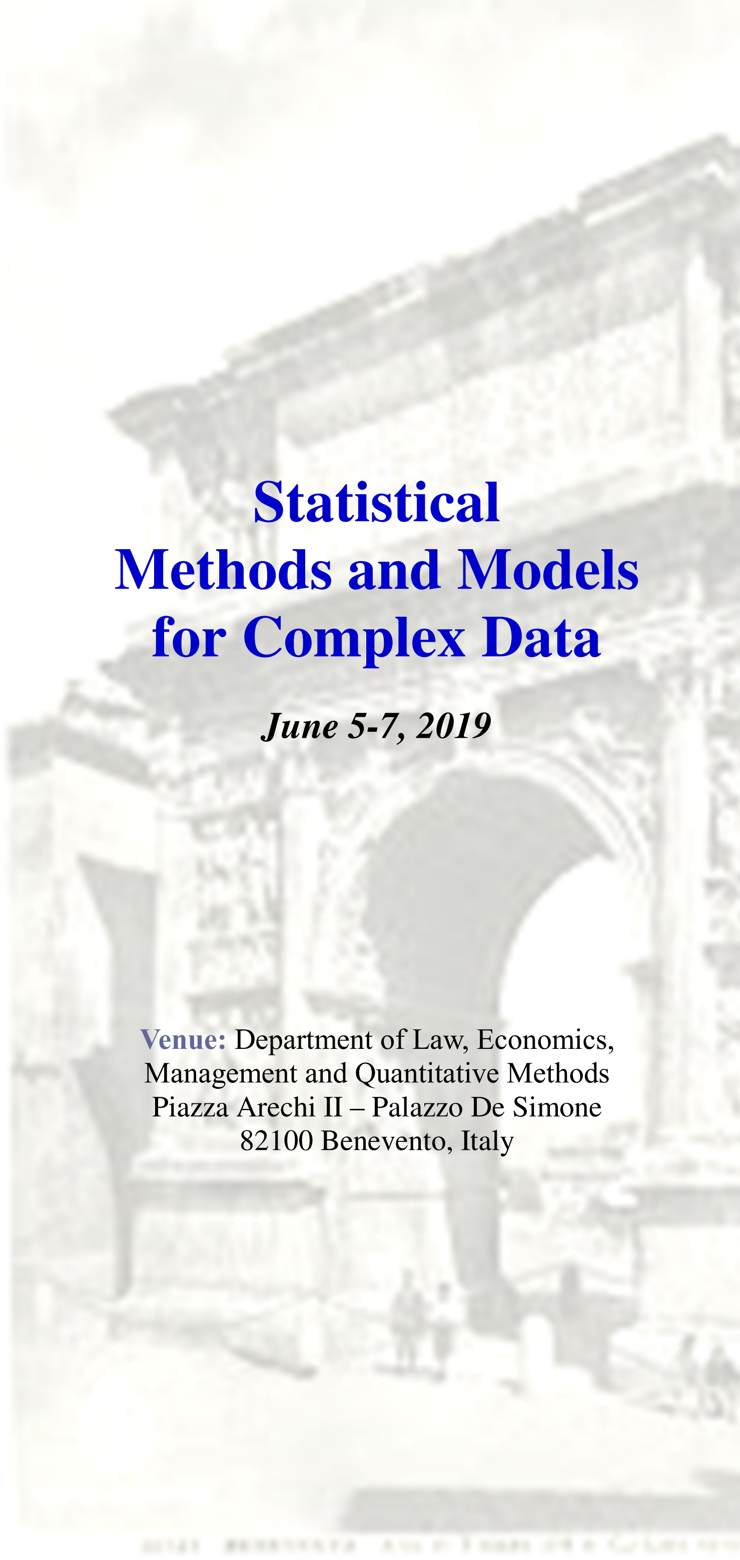
- *JSPS KAKENHI Kiban (S) Grand-in-Aid No. 18H05290 (M. Taniguchi)*
- *Institute for Mathematical Science, Tokyo - Japan*
- *University of Sannio, Benevento – Italy*
- *Waseda Research Institute for Science and Engineering, Tokyo – Japan*



Statistical Methods and Models for Complex Data

June 5-7, 2019

Venue: Department of Law, Economics, Management and Quantitative Methods
Piazza Arechi II – Palazzo De Simone
82100 Benevento, Italy

Wednesday JUNE 5, 2019

Opening: 11:30 – 11:45
A. C. Monti, M. Taniguchi

Session I (11:45 – 12:45) *Chair. T. Proietti*

Keynote speaker
Time Series Analysis under Non-Standard Settings
M. Taniguchi

12:45 – 14:00 *Lunch*

Session II (14:00 – 15:30) *Chair F. Akashi*

Heterogeneous Component Multiplicative Error Models for Forecasting Trading Volumes
A. Naimoli. **G. Storti**

Robust Time Series Methods in Anti-Fraud
P.J. Rousseeuw, M. Riani, **D. Perrotta,** M. Hubert

Robust Model Selection in Nonlinear Time Series with Trend, Seasonality and Level Shift
G. Morelli, **F. Torti**

15:30 - 16:00 *Coffee break*

Session III (16:00 – 17:00) *Chair X. Dou*

The Use of Factorial Methods to Explore Complex Social Networks
G. Ragozini

An Impartial Trimming Approach for Joint Dimension and Sample Reduction
P. Amenta, L. Greco, **A. Lucadamo**

Thursday JUNE 6, 2019

Session IV (9:00 – 11:00) *Chair A.C. Monti*

Keynote speaker
Robust and Consistent Variable Selection in High-dimensional Generalized Linear Models
M. Avella-Medina, **E. Ronchetti**

Robust Diagnostic Transformations of Responses that can be Positive or Negative
A.C. Atkinson, A. Corbellini, **M. Riani**

Mode Trimming for Robust Estimation and Cluster Analysis
F. Dotto, **A. Farcomeni**, L. Garcìa-Escudero, A. Mayo-Iscar

11:00 – 11:30 *Coffee break*

Session V (11:30 -13:00) *Chair Y. Liu*

Robust Causality Test of Infinite Variance Processes
F. Akashi, M. Taniguchi, A. C. Monti

Modelling Ordinal Time Series: An Integrated Approach
R. Simone, **M. Corduas**, D. Piccolo

Co-clustering Algorithms for Temporal Data represented by Histograms
A. Balzanella, **R. Verde**

13:00 – 14:15 *Lunch*

Session VI (14:15 – 15:45) *Chair D. Piccolo*

Dependence Structures of the B-spline Copulas including the Bernstein ones
X. Dou, S. Kuriki, G. D. Lin, D. Richards

P-splines based Time Series Clustering for Index-tracking Portfolio
A. D'Ambrosio, R. Mattera, **M. Scaglione**, **G. Scepi**

Analysis of Censored Data under Skew GEV Distribution
E. Masiello, **S. Pacillo**, P. Ribereau.

15:45 – 16:15 *Coffee Break*

Session VII (14:15 – 15:45) *Chair M. Riani*

Robust Link Functions for Ordinal Response Models
V. Scalera, M. Iannario, **A. C. Monti**

Generalized Residuals for Outlier Detection in Ordinal Regression Models
M. Iannario, A .C. Monti

Friday JUNE 7, 2019

Session VIII (9:00 – 10:30) *Chair E. Ronchetti*

Robust Composite Estimators for Variance Component Models
C. Agostinelli, V. J. Yohai

Robust Estimation of Multilevel Models: a Forward Search Approach
A. Corbellini, **L. Grossi**, F. Laurini

Labour Market Analysis through Robust Multilevel Models and Transformations
A. Corbellini, M. Magnani, G. Morelli

10:30– 11:00 *Coffee break*

Session IX (11:00 – 12:00) *Chair M. Taniguchi*

Regularized Estimation of High Dimensional Auto- and Cross-Covariance Matrices
A. Giovannelli, **T. Proietti**

Prediction-based Parameter Estimation of Time Series
Y. Liu