



Special track on Space and space-time models: methods and environmental applications



In collaboration with GRASPA-SIS the working group on Environmental Statistics

June, 19 2013

Department of Economics and Management - University of Brescia, Contrada S. Chiara 50, Brescia

GRASPA-SIS is the permanent working group on Environmental Statistics, recently established by the Italian Statistical Society. It promotes statistical and interdisciplinary research in the field of environmental quality, safety and sustainability including air and water quality, epidemiology, earth science and ecology. The group fosters methodological development and applications in fields such as spatial and spatio-temporal modelling, functional data analysis, spatial and spatio-temporal sampling and extreme values. Moreover it endorses co-operation and interchange of views among statisticians, academics from environmental sciences as well as practitioners from government and independent environmental agencies.

A call for contributions to a special issue in the Springer Journal *Stochastic Environmental Research and Risk Assessment* on “spatio-temporal models: methods and environmental applications” will be held after the conference.

11.15 – 12.30

SPEC-M1.1 - SPACE AND SPACE-TIME MODELS - A: METHODS AND ENVIRONMENTAL APPLICATIONS

B1

Organizer and Chairman: Alessandro Fassò

Discussant: Marco Minozzo

- Bayesian analysis of the multivariate dependence of three transitional water ecosystem classifications
Pollice A., Arima S., Jona Lasinio G., Basset A., Rosati I.
- Coherency in space of lake and river temperature and water quality records
Scott M., Miller C., Finazzi F., Haggart R.
- Tapering Space-Time Covariance Functions
Porcu E., Zastavnyi V., Bevilacqua M.



14.30 – 15.45

SOLI-A1.2 - SPACE AND SPACE-TIME MODELS B: METHODS AND ENVIRONMENTAL APPLICATIONS

B7

Organizer: Alessandro Fassò

Chairman: Giovanna Jona Lasinio

- Functional Data Modeling in climatology
Ignaccolo R.
- The INLA approach for disease mapping and health risk assessment
Cameletti M.
- Hierarchical spatio-temporal models for short-term predictions of air pollution data
Bruno F., Paci L.
- Dynamic models for environmental variables
Valentini P., Di Battista T.

15.45 – 16.45

PLENARY A1 - ADVANCES IN ESTIMATION OF LARGE HIERARCHICAL SPATIO-TEMPORAL MODELS

AM

Chairman: Daniela Cocchi

Speaker: Håvard Rue

17.15 – 18.30

SOLI-A1.6 - SPACE AND SPACE-TIME MODELS C: METHODS AND APPLICATIONS

B7

Organizer: Alessandro Fassò

Chairman: Luigi Ippoliti

- The estimation of latent temporal patterns in multivariate geolocated time series
Finazzi F., Scott M.
- A latent variable approach to modelling multivariate geostatistical skew-normal data
Bagnato L., Minozzo M.
- A latent variables based-model for spatiotemporal environmental analysis
De Iaco S., Palma M., Posa D.
- A latent variable approach for clustering a spatial network
Pauli F., Torelli N., Zaccarin S.