GRASPA 2019 PROGRAM

The venue of the conference is the Ex-AURUM Building, located in Largo Gardone Riviera, Pescara. It is located between the University campus (Viale Pindaro) and the Pineta Dannunziana. The place can be reached by Bus from the city center (Corso Vittorio Emanuele) in about 10/15 mins. It can also be possible to follow the cycle-pedestrian path along the Riviera, at a walking distance of about 35 mins.

Monday – 15 july 2019

8.45 - 9.15 **Registration**

9.15 - 9.45 **Conference Opening and Welcome Address**

9.45-10.45 **Session 1 -** ***Assessment of health risks from environmental stressors***
(Organizers: M. Ventrucci - A. Ranzi)

Integrated Environmental Health Impact Assessment: example of applications in Italy
Ranzi A.

Air quality numerical models. Don't leave them alone
Bonafè G., Gallai I., Goglio A.C., Giaiotti G., Gianesini E., Montanari F. Petrini A.

A Hierarchical Bayesian Spatio-Temporal Model to Estimate the Short-term Effects of Air Pollution on Human Health
Grazian C. , Fontanella L., Ippoliti L., Valentini P.

10.45-11.15 **Coffee break**

11.15 - 12.00 **Keynote lecture 1 -** Marc Genton

Trajectory Functional Boxplots

12.00 - 13.00 **Session 2 -** ***Statistics for complex data*** (Organizer: L. Sangalli)
Analysis of Data Over Complex Regions
Ferraccioli F., Sangalli L.M., Finos L.

Analysis of replicated spatially correlated functional data
Ray S., Alghamdi S.

Change Detection of 4D Spatiotemporal Data Using a LASSO-Gaussian Process Approach: Preliminary results
Fassò A., Valli I., Madonna F.

13.00-14.30 **Lunch break**

14.30-15.30 **Session 3 - *Circular Data*** (Organizers: M. Di Marzio - A. Panzera)

Smooth ANCOVA models for circular regression
Crujeiras R.M., Alonso-Pena M., Ameijeiras-Alonso J.

Tracking the Magnetic North Pole
Di Marzio M., Fensore S., Panzera A., Taylor C.

Classification of directional data through data depth
Porzio G., Demni H., Messaoud A.

15.30 -16.15 **Keynote lecture 2 -** Alexandra M. Schmidt

Non-Gaussian spatial and spatio-temporal processes

16.15-16.45 **Coffee Break -Poster exhibition**

16.45 -17.45 **Session 4 - Forest Statistics from Local to Global Scales**
(Organizers: M. Marcheselli - A. Steel)

A design-based approach for mapping the diversity of forest attributes
Di Biase R.M, Pisani C.

The SEEA AFF forest accounts application in Senegal
Cerilli S., Tubiello F, Sadio I.

Mapping the intensity function of a point process in unobserved windows
Gabriel E., Coville J., Chadoeuf J.

17.45 – 18.45 **Session 5 - Dealing with extreme values in environmental problems**
(Organizers: C. Gaetan - I. Prosdocimi)

Tracking daily mean flows through a river network
Brady A., Faraway J., Prosdocimi I.

Modelling the spatial extent and severity of extreme European windstorms
Sharkey P., Tawn J., Brown S.

Extreme weather, ensemble prediction and postprocessing: from forecast to evaluation
Taillardat M.

21.00 **Social dinner.** It will take place in the city center at the restaurant *Le Terrazze Roof Garden, Hotel Esplanade*. Please send an email to Eugenia Nissi (nissi@unich.it) for special-meal requests (e.g. vegetarian and/or celiac)

Tuesday – 16 july 2019

9.00-10.00 **Session 6 - Spatio-temporal functional data analysis**
(Organizer: F. Finazzi)

D-STEM: functional hidden dynamic geostatistical model
Wang Y., Finazzi F., Fassò A.

Functional approaches for spatiotemporal satellite data
Miller C., Sehn A., O'Donnell R., Gong M., Wilkie C.

A functional kriging approach to multi-fidelity modelling
Menafoglio A., Grujic O., Yang G., Caerz J.

10.00-11.00 **Session 7 - *Advances in environmental latent variable models***
(Organizer: F. Lagona)

Autoregressive random effects models for circular longitudinal data using the embedding approach
Maruotti A., Ranalli M.

Variable selection in small area models
Arima S. , Polettini S.

Multivariate change-point analysis for climate time series
Mastrantonio G, Jona Lasinio G., Pollice A., Capotorti G., Teodonio L., Blasi C.

11.00- 11.30 **Coffee Break - Poster exhibition**

11.30-12.15 **Keynote lecture 3 -** John T. Kent
The space environment for satellites orbiting the earth

12.15-13.15 **Session 8 - Complex space-time processes and probabilistic forecast of seismic events**
(Organizer: G. Adelfio)

Spatio-temporal earthquake clustering: insights and outlooks from Network Analysis
Varini E., Peresan A., Zhuang J.

Radon time series analysis of Italian monitoring network
Siino M., ScuderoS., D'Alessandro A.

Monitoring the spatial interactions among data streams generated by spatio-temporal process
Balzanella A, Irpino A., Verde R.

13.15-14.30 **Lunch break**

14.30-15.30	**Session 9 - Models and indicators for ecological processes** (Organizers: C. Caculli- F. Divino) National-scale spatial modelling of landscape connectivity and stressor interactions on aquatic biodiversity *Wilkie C., Miller C., Scott M., Belmont Osuna J.* Improving the environmental impact of statistics- the need for multidisciplinary collaboration *Meissner K.* Spatial Bayesian Hierarchical models to study the bacterium Xylella fastidiosa *Cendoya M., Martínez-Minaia J. M., Dalmau V., Ferrer A., Conesa D., López-Quílez A., Vicent A.*
15.30-16.50	**Session 10 - *Spatial and Spatio-Temporal models for environmental applications*** (Organizers: L. Ippoliti - P. Valentini) PM10 prediction of daily data at 1 km grid using satellite data *Scortichini N., Renzi N, and Stafoggia* Nonparametric Bayesian Approaches to Covariance Functions on Spheres *Porcu E., Bissiri P., Tagle F., Quintana F.* An R-based widget for Bayesian disease mapping *Gardini A., Greco F., Trivisano C.* Efficient estimation of nonstationary spatial covariance functions with application to high-resolution climate model emulation *Sun Y.*
16.50 -17.30	**Coffee break and Best Poster Award for the three best posters:** The posters will be evaluated in terms of design and layout, coherence, argumentation and methodology, awareness of previous work, attractiveness, message and main points, balance of text visuals, and overall impression **Notes on POSTER SIZE:** The poster size is A0, equals 118 cm height × 84 cm length, or smaller. Please choose upright format and keep in mind that the font sizes should be big enough to allow your poster to be read from some distance.

POSTERS

POSTER TITLES	AUTHORS
An INLA spatio-temporal model for zero-inflated marine plastic litter abundance	C. Calculli, A. Pollice, I. Paradinas, L. Sion and P. Maiorano
Modeling hydrologic data by means of re-parametrization of Beta-Singh-Maddala distribution	F. Condino, F. Domma and S. Franceschi
On the reliability of some tests on type of non-separability and type of class of covariance models	C. Cappello, S. De Iaco, M. Palma and D. Posa
Multiresolution Decomposition of Areal Count Data	R. Flury and R. Furrer
Spatio-temporal analysis of extreme river flow	M. Franco-Villoria, M. Scott and T. Hoey
Data fusion for air quality mapping using sensor data: feasibility and added-value through an application in Nantes	A. Gressent, L. Malherbe and A. Colette
Goodness of Fit Test For Wrapped Normal Distribution	A. Nodehi
Graphical model selection for air quality time series	L. Paci and G. Consonni
Multivariate geostatistical tools for time series modeling and prediction	S. De Iaco, S. Maggio, M. Palma and D. Pellegrino
A nonparametric spatio-temporal approach for multiple CUSUMs of evapotranspiration	D. Pellegrino, G. Giungato and S. De Iaco
The impact of earthquakes on demographic changes in Italy. A comparison between L'Aquila and the Emilia Romagna cases	E. Ambrosetti, F. Licari, S. Miccoli and C. Reynaud
The preliminary study of the PM1 main components and of their seasonal variation using a linear parametric model	A. Speranza, G. Jona Lasinio and R. Caggiano
Estimation of Spatial Deformation for Non-stationary Processes via Variogram Alignment	Qadir G.A., Sun Y., Kurtek S.
Induced earthquakes and the ETAS model	Z. Varty
Prior specification in one-factor mixed models applied to community ecology data	Ventrucci M., Burgazzi G., Cocchi D. and Laini A.
Anisotropic attenuation of the macroseismic intensity	R. Rotondi, E. Varini
CircSpaceTime: an R package for spatial and spatio-temporal modeling of Circular data	G. Jona Lasinio, M. Santotoro and G. Mastrantonio
Sensitization to allergens and environmental features: a preliminary analysis to study their relation	S. Fabris, G. Jona Lasinio and M. Santoro
Semiautomatic dictionary-based tweet classification for measuring well-being	M. Cameletti, S. Fabris, S. Schlosser and D. Toninelli