



Università  
degli Studi  
di Palermo



## PROGRAMME GRASPA 2023

Palermo, July 10-11, 2023



*Dipartimento di Scienze Economiche Aziendali e Statistiche, Università degli Studi di Palermo*

*Aula Magna ‘Vincenzo Li Donni’, viale delle Scienze ed. 13*



Stazione  
Zoologica  
Anton Dohrn  
Napoli

ISTITUTO NAZIONALE  
DI GEOFISICA E VULCANOLOGIA



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ARPA SICILIA



## Monday, July 10

8:30-9:15	<b>Registration</b>
9:15-9:45	<b>Conference Opening and Welcome Address</b> A. Mineo - <i>Head of the Dipartimento di Scienze Economiche, Aziendali e Statistiche</i> C. Crocetta - <i>President of SIS</i> F. Lagona - <i>President of GRASPA</i> G. Lovison - <i>GRASPA Founder Member</i>
9:45 -11:00	<b>Session1: Complex data and models with environmental applications (R. Ignaccolo - L. Sangalli)</b> <ul style="list-style-type: none"> <li>- Statistical analysis of complex Networks <i>N. Pronello, Università di Chieti-Pescara</i></li> <li>- O2S2 for uncertainty quantification in natural background level concentrations <i>A. Menafoglio, Politecnico di Milano</i></li> <li>- Penalized multivariate hidden semi-Markov models for time series environmental data. <i>M. Mingione, Università di Roma Tre</i></li> </ul>
11:00-11:30	<b>Coffee break</b>
11:30 -12:15	<b>Keynote lecture: Modeling Extremal Streamflow using Deep Learning Approximations and a Flexible Spatial Process (chair: A. Pollice)</b> <i>Brian Reich, North Carolina State University, Raleigh</i>
12:15-13:30	<b>Session2: Statistical Methods and Environmental Studies (M. Chiodi - V. Ferrantelli)</b> <ul style="list-style-type: none"> <li>- Analytical Methods of the Respiratory Epidemiological Surveys carried out by the National Research Council (CNR) <i>G. Viegi, Ifst CNR</i></li> <li>- Exploring the effects of temperature on demersal fish communities in the Central Mediterranean Sea using INLA-SPDE modeling approach <i>G. Milisenda, Stazione Zoologica Anton Dohrn</i></li> <li>- ARPA Sicily: collection of environmental data, for an integrated vision of the regional territory and to support the "One Health" approach. <i>A. Conti, "Environment and Health" Unit - ARPA Sicilia</i></li> </ul>
13:30-15:00	<b>Lunch Break</b>
15:00-16:15	<b>Session3 - Speedy Poster Presentations</b>
16:15-16:45	<b>Coffee Break</b>
16:45-18:00	<b>Session 4: Measuring and modelling of environmental processes (I. Prosdocimi - L. Sangalli)</b> <ul style="list-style-type: none"> <li>- A Bayesian Time Series Model for Reconstructing Hydroclimate from Multiple Proxies <i>N. Cahill, Maynooth University</i></li> <li>- Some empirical results on nearest neighbour pseudo-populations for resampling from spatial populations <i>R. M. Di Biase, Università degli Studi di Siena</i></li> <li>- Kriging Riemannian data for environmental applications <i>P. Secchi, Politecnico di Milano</i></li> </ul>
18:00-18:30	<b>GRASPA General Assembly</b>
20:30	<b>Social Dinner: ex Monastero dei Teatini (Dipartimento di Giurisprudenza, via Maqueda 172)</b>

**Tuesday, July 11**

9:30-10:45	<b>Session 5: Spatio-temporal modelling for urban problems (N. D'Angelo - M. Sciandra)</b> <ul style="list-style-type: none"> <li>- ARPALData: an R package for retrieving and analyzing air quality and weather data from ARPA Lombardia (Italy) <i>P. Maranzano, Università degli Studi di Milano-Bicocca</i></li> <li>- Stochastic reconstruction of a spatio-temporal Hawkes process with isotropic excitation: an application to road accidents <i>P. Alaimo Di Loro, Università di Roma LUMSA</i></li> <li>- Mechanistic spatio-temporal modeling of infectious diseases and crime data on urban environments <i>J. Mateu, Universitat Jaume I, Castellon Spain</i></li> </ul>
10:45-12:15	<b>Session 6: Coffee Break and Poster exhibition</b>
12:15-13:00	<b>Keynote lecture: Estimating Covid-19 transmission time using Hawkes point processes (chair: J. Mateu)</b> <i>Rick Schoenberg - UCLA University, Los Angeles, California</i>
13:00-14:30	<b>Lunch Break</b>
14:30-15:45	<b>Session 7: Advances in statistical ecology (F. Lagona - A. Pollice)</b> <ul style="list-style-type: none"> <li>- A species distribution modelling framework for combining citizen science data from different monitoring schemes. <i>J. Belmont Osuna, University of Glasgow</i></li> <li>- Spatial occurrence models using Integrated Nested Laplace Approximation <i>S. Martino, Norwegian University of Science and Technology</i></li> <li>- Data analysis of photogrammetry-based mapping: the sea cucumbers in the Giglio Island as a case study <i>G. Mastrandrea, Politecnico di Torino</i></li> </ul>
15:45-17:00	<b>Session 8: Controlling for unmeasured confounding: statistical issues and recent advances in air pollution and health studies (M. Ventrucci - L. Ippoliti - L. Ventura)</b> <ul style="list-style-type: none"> <li>- Confounder-Dependent Bayesian Mixture Model: Characterizing Heterogeneity of Causal Effects in Air Pollution Epidemiology <i>D. Zorzetto, Università di Padova</i></li> <li>- On the effect of spatial confounding: an approach based on the theory of quadratic forms. <i>M. Narcisi, Università di Bologna</i></li> <li>- A Flexible Bayesian Time-varying Coefficient Regression Model in Health Applications <i>C. Zaccardi, Università degli Studi 'Gabriele d'Annunzio' di Chieti</i></li> </ul>
17:00-18:00	<b>Coffee break and Best Poster Award</b>