

TIES-GRASPA 2017 CONFERENCE

LIST OF INVITED TALKS, ordered by session tag (version: 01/06/2017)

Session Tag	Session title	Role	Name	Presentation Title
AIR2	Studies on Air Pollution in China	Organizer	Song Xi Chen	
AIR2		Speaker 1	Bin Guo	Measuring the air pollution severity In North China Plain
AIR2		Speaker 2	Hui Huang	Explore the relations of pollutant concentrations with meteorological and locational variables
AIR2		Speaker 3	Minya Xu	Regionalization of Multi-scaled Air Pollutants Based on Functional Principal Component Analysis
AIR2		Speaker 4	Song Xi Chen	Cautionary Tales on Air Quality Improvement in Beijing
CLIM1	Spatial statistics in climate and environmental studies	Organizer	Carlo Gaetan	
CLIM1		Speaker 1	Stefano Castruccio	Modeling Uncertainty for Wind Energy Resources in Saudi Arabia
CLIM1		Speaker 2	Reinhard Furrer	Brute force or hand-waiving: spatial interpolation approaches at your service
CLIM1		Speaker 3	Denis Allard	A latent Gaussian approach for modeling geological sequences: model, inference and conditional simulation
CLIM2	Stochastic weather generators and stochastic downscaling of climate variables	Organizer	Denis Allard	
CLIM2		Speaker 1	Anastasia Baxevani	Weather generators by means of truncated and transformed Gaussian random fields
CLIM2		Speaker 2	Lionel Benoit	Stochastic rainfall generation from a censored latent Gaussian field: micro-scale parametrization
CLIM2		Speaker 3	Mathieu Vrac	Spatial hybrid downscaling of extreme precipitation fields
CLIM4	Advances in weather forecasting	Organizer	Orietta Nicolis	
CLIM4		Speaker 1	Omar Cuevas	Improve numerical weather forecasts over astronomical sites in Chile using a Kalman filter
CLIM4		Speaker 2	Sándor Baran	Statistical post-processing of ensemble forecasts for precipitation accumulation
CLIM4		Speaker 3	Mai Liu Diaz	Spatio-temporal modelling for predicting wind speed and direction on the coast of Valparaiso

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CLIM5	Spatio-temporal analysis of ground-based and satellite observations - I	Organizer	Fabio Madonna	
CLIM5		Speaker 1	Birgit Hassler	Quantifying uncertainties in the monthly mean zonal mean, and in vertical profiles, of sparsely sampled atmospheric variables
CLIM5		Speaker 2	Betsy Weatherhead	Planning environmental observing systems of the future: the role of statistics
CLIM5		Speaker 3	Francesco Finazzi	Uncertainty assessment of co-located radiosonde and remote sensing profiles by harmonization
CLIM6	Spatio-temporal analysis of ground-based and satellite observations - II	Organizer	Fabio Madonna	
CLIM6		Speaker 1	Graziano Coppa	A numerical and experimental investigation of uncertainties in air temperature measurements, under the MeteoMet project
CLIM6		Speaker 2	Fabio Madonna	Homogenizing radiosonde temperature and humidity profile in the BARON for C3S Service
CLIM6		Speaker 3	Ilia Negri	Spatio-temporal mismatch for Aerosol profiles
CLIM8	Precipitation microphysical retrievals and analysis using weather radar observations	Organizer	Michela Cameletti and Stefania Ghigo	
CLIM8		Speaker 1	Luca Baldini	On modelling rain drop size distributions for hydrological applications and remote sensing
CLIM8		Speaker 2	Renzo Bechini	Classification techniques for the retrieval of microphysical information from dual-polarization weather radars
CLIM8		Speaker 3	Stefano Barberis	Verification of Severe Thunderstorms Forecast in Lombardia
COMP1	ISBA-EnviBayes: Computational statistics for large spatial data	Organizer	Montse Fuentes	
COMP1		Speaker 1	Bo li	Comparison between spatio-temporal random processes and application to climate model data
COMP1		Speaker 2	Marc Genton	Statistics-Based Compression of Global Wind Fields
COMP1		Speaker 3	Marian Scott	Patterns, missingness and structure in spatio-temporal data
COMP2	Some new developments in the R-INLA project	Organizer	Michela Cameletti and Marta Blangiardo	
COMP2		Speaker 1	Haavard Rue	Some new developments in the R-INLA project
COMP2		Speaker 2	Fabian Bachl	Inlabru: Bayesian modeling and point process analysis for ecological data and beyond
COMP2		Speaker 3	Anna Freni Sterrantino	Multivariate Conditional Autoregressive models within R-INLA

Session Tag	Session title	Role	Name	Presentation Title
DEMO2	Demographic behaviors and environmental aspects	Organizer	Daniele Vignoli and Filomena Racioppi	
DEMO2		Speaker 1	Giulia Cesaroni	Air pollution and reproductive behavior in Rome
DEMO2		Speaker 2	Elena Ambrosetti	Earthquakes and human displacement in Italy. A comparison between L'Aquila and the Emilia Romagna's cases
DEMO2		Speaker 3	Laura Grisotto	Material deprivation and social segregation in the census cohort studies
DEMO3	Interaction between population and environment	Organizer	Daniela Cocchi	
DEMO3		Speaker 1	Carlo Giovanni Camarda	Modelling and decomposing vital rates: a non-parametric approach
DEMO3		Speaker 2	Irene Mosca	International migration and family environment: evidence from Ireland
DEMO3		Speaker 3	Raya Muttarak	Applying demographic methods and concepts to the study of vulnerability to global environmental change
DEMO3		Speaker 4	Alessandra Petrucci	Climate change and population movement in Tanzania
DIR1	Environmental directional statistics	Organizer	Francesco Lagona	
DIR1		Speaker 1	Marco di Marzio	Nonparametric discrimination for directional data
DIR1		Speaker 2	Gianluca Mastrantonio	A flexible Bayesian model for clustering seasonal time series with linear and circular components
DIR1		Speaker 3	Rosa Crujeiras Casais	A directional look on fires
DIR2	Compositional Data Analysis	Organizer	Alessandra Menafoglio	
DIR2		Speaker 1	Jennifer Mckinley	Interpretation of compositional data analysis of geochemical data with case studies from environmental management and the identification
DIR2		Speaker 2	Karel Hron	Regression between parts of compositional data using symmetric balances
DIR2		Speaker 3	Peter Filzmoser	Pairwise association between parts of a composition
DIR2		Speaker 4	Vera Pawlowsky-Glahn	Mapping groundwater arsenic concentrations in Varanasi, Uttar Pradesh, India

Session Tag	Session title	Role	Name	Presentation Title
DIR3	Hidden Markov models in climate and environment	Organizer	Francesco Lagona	
DIR3		Speaker 1	Francesco Lagona	Dynamic mixtures of copulas for cylindrical time series
DIR3		Speaker 2	Antonello Maruotti	Robust model-based clustering for longitudinal circular data
DIR3		Speaker 3	Luigi Spezia	An anisotropic and inhomogeneous hidden Markov model for the classification of water quality spatio-temporal series
DIR4	Spatial data analysis on spheres and other bidimensional manifolds	Organizer	Laura Sangalli	
DIR4		Speaker 1	Maryam Ilyas	Coverage uncertainties in global temperature fields
DIR4		Speaker 2	To be announced	To be announced
DIR4		Speaker 3	Mikyong Jun	Multivariate point process models for multiple rain type occurrences
ECO1	Advances in Ecological Modelling	Organizer	Grace Chiu and Hideyasu Shmidazu	
ECO1		Speaker 1	Hideyasu Shimadzu	Rarefaction techniques and species richness in biodiversity studies
ECO1		Speaker 2	Scott Foster	Grouping in the presence of Artefacts: model-based approaches to avoid systematic noise
ECO1		Speaker 3	Eric Fu	Shape modelling and clustering of marine mammal dive profiles
ECO2	Bayesian ecological modelling and biodiversity assessment	Organizer	Alessio Pollice	
ECO2		Speaker 1	David Valentin Conesa Guillén	Identifying the best fishing-suitable areas under the new European discard ban using Bayesian spatio-temporal beta regression models.
ECO2		Speaker 2	Crescenza Calculli	Modelling fish fauna assemblages to detect factors affecting differences between coral and non coral habitats
ECO2		Speaker 3	Giovanna Jona Lasinio	Assessing the role of the spatial scale in the analysis of lagoon biodiversity. A case-study on the macrobenthic fauna of the Po River Delta

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ECO3	Understanding processes in ecology and environmental epidemiology	Organizer	Ayesha Ali	
ECO3		Speaker 1	Catherine Crea	Regularization for grouped Dirichlet-multinomial regression in the analysis of ecological networks
ECO3		Speaker 2	Jamie Robins	Time and Spatial Varying Confounding in Environmental Epidemiology
ECO3		Speaker 3	Guowen Huang	Multivariate space-time modelling of multiple air pollutants and their health effects accounting for exposure uncertainty
ECO4	Citizen science in ecology	Organizer	Pascal Monestiez	
ECO4		Speaker 1	Joel Chadoeuf	Estimating dispersal kernels using citizen science data: the Montagu's harrier example
ECO4		Speaker 2	Christophe Botella	Plant species distribution modeling for opportunistic occurrences, a case study on Pl@ntNet data
ECO4		Speaker 3	Nick Isaac	Modelling biodiversity change from messy and biased data
ENV1	Sampling strategies for assessing climate change effects	Organizer	Marzia Marcheselli	
ENV1		Speaker 1	Roberto Benedetti	Spatially balanced sampling on several occasions for population monitoring
ENV1		Speaker 2	Caterina Pisani	Inference on forest attributes and ecological diversity of trees-outside-forests based on two-phase inventories
ENV1		Speaker 3	Luca Secondi	Wildfire occurrence in Italy: exploring the role of socio-economic, urban development and environmental factors
ENV2	Understanding our environment	Organizer	Marian Scott	
ENV2		Speaker 1	Esther Jones	Efficiently modelling telemetry data
ENV2		Speaker 2	Ben Marchant	Using extreme value statistics to forecast groundwater floods and droughts
ENV2		Speaker 3	Mark Cutler	Impact of logging on the resilience of SE Asian forests: remote sensing two decades of forest change

Session Tag	Session title	Role	Name	Presentation Title
ENV3	Statistics and Data Mining for Sustainable Energy Modeling and Prediction	Organizer	Yulia Gel	
ENV3		Speaker 1	John Boland	Assessment of solar radiation components in Brazil using the BRL Diffuse Radiation model
ENV3		Speaker 2	Carlo Lucheroni	Multivariate models for spatiotemporal wind energy modeling
ENV3		Speaker 3	Fabrizio Sossan	A dispatched-by-design architecture for distribution systems based on exploiting local flexibility
ENV4	Modelling Environmental Variation I	Organizer	Abdel El-Shaarawi	
ENV4		Speaker 1	Sylvia R. Esterby	Regional trends in fire danger from historical records
ENV4		Speaker 2	Renjun Ma	Multivariate state-space models for skewed environmental data
ENV4		Speaker 3	Ali S. Gargoum	Count data dynamic forecasting models with environmental applications
ENV5	Environmental processes and human activities: capturing their interactions via statistical methods (EPHASTAT)	Organizer	Daniela Cocchi (PI of the PRIN 2015 EPHASTAT project)	
ENV5		Speaker 1	Haakon Christopher Bakka	Going around the barriers - simple models for complex ecological behaviour
ENV5		Speaker 2	Angela Ferruzza	Monitoring Sendai Framework for Disaster Risk reduction and SDGs: indicators to analyse interactions among Human and Natural Systems
ENV5		Speaker 3	Kristian Meissner	Biodiversity, ecological status assessment and management of rivers and lakes: new solutions to old issues?
ENV5		Speaker 4	Bruno Sansò	Analysis of Extremes in Climate Model Predictions: Assessment and Comparisons
ENV6	Modelling Environmental Variation II	Organizer	Abdel El-Shaarawi	
ENV6		Speaker 1	Javier Santacruz Cano	The challenge of global water supply with time-series treatment forecasting
ENV6		Speaker 2	Vyacheslav Lyubchich	Spatio-temporal clustering of water quality trends
ENV6		Speaker 3	Yasmine M. Abdelfattah	Spatiotemporal interpolation of Rainfall variability in Blue Nile Basin for the period 1998–2016

Session Tag	Session title	Role	Name	Presentation Title
ENV7	Modelling Environmental Variation III	Organizer	Abdel El-Shaarawi	
ENV7		Speaker 1	Yulia Gel	Climate Adaptation and Risk Management in Insurance
ENV7		Speaker 2	Abdulkadir Hussein	Methods for Zero-inflated and autocorrelated counts with application to health care performance analysis
ENV7		Speaker 3	Khouzeima Moutanabbir	Estimation Problems in the Three-Parameter Lognormal Models Using the Marginal Likelihood
EPI1	Spatial modeling for epidemiological data	Organizer	Maria Franco Villoria and Massimo Ventrucci	
EPI1		Speaker 1	Andrea Ranzi	Characterization of spatial and temporal variability of exposure to air pollution in epidemiological studies
EPI1		Speaker 2	Dae-Jin Lee	Modelling latent trends from spatio-temporally grouped data using composite link mixed models
EPI1		Speaker 3	Pasquale Valentini	A Bayesian S-FVAR model to estimate the short-term effects of air pollution on human health
EPI2	Spatio-temporal disease mapping: models and applications	Organizer	Lola Ugarte	
EPI2		Speaker 1	Ying MacNab	On nonseparable spatiotemporal covariance models, with applications to Bayesian disease mapping
EPI2		Speaker 2	Tomás Goicoa	Misspecified identifiability constraints produce wrong PQL and INLA fits of spatio-temporal disease mapping models
EPI2		Speaker 3	Daniel Martinez	Two Level Modeling of Relative Risk of Dengue Disease at Small Spatial Scale in Colombia
EPI3	Cancer mapping	Organizer	Behzad Mahaki	
EPI3		Speaker 1	Volker J Schmid	Spatio-Temporal Multivariate Shared Component Modeling for Cancer Data
EPI3		Speaker 2	Marzieh Nasrazadani	Mapping of stomach, colorectal and bladder cancers in Iran, 2004-2009: Applying Bayesian Polytomous Logit model
EPI3		Speaker 3	Yaghoub Hajizadeh	Bladder cancer in Iran: Geographical Distribution and Risk Factors
EPI3		Speaker 4	Behzad Mahaki	Bivariate Spatio-Temporal Shared Component Modeling: Mapping of Relative Death Risk due to Colorectal and Stomach Cancers in Iran Provinces

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EPI4	Modelling environmental and health data	Organizer	Marta Blangiardo	
EPI4		Speaker 1	Duncan Lee	A spatio-temporal process-convolution model for quantifying the effects of air pollution on respiratory prescription rates in Scotland
EPI4		Speaker 2	Veronica Berrocal	A segmentation-based approach for non-stationary spatial modeling of environmental data
EPI4		Speaker 3	Virgilio Gomez-Rubio	Modeling multivariate complex spatial data with INLA
EPI5	Spatio-temporal modeling of disease risk to quantify the changing nature of health inequalities	Organizer	Duncan Lee	
EPI5		Speaker 1	Gary Napier	A General Methodological Framework for Identifying Disease Risk Spatial Clusters Based Upon Mixtures of Temporal Trends
EPI5		Speaker 2	Aritz Adin	Risk estimates in disease mapping when discontinuities are present
EPI5		Speaker 3	Annibale Biggeri	Spatio-temporal Bayesian Kriging Models to Predict Residential Air Pollutants Exposure
FUN1	Functional geostatistics	Organizer	Elvira Romano	
FUN1		Speaker 1	Clair Miller	Functional approaches for sparse spatiotemporal satellite data
FUN1		Speaker 2	Francisco J Rodríguez-Cortés	Spatial clustering of LISA functions: a functional approach
FUN1		Speaker 3	Alicia Nieto Reyes	The axiomatic definition of statistical depth
FUN2	Spatial analysis of Complex and Object data II	Organizer	Piercesare Secchi and Laura Sangalli	
FUN2		Speaker 1	Sara De Luna	Multi-resolution clustering for dependent functional data with applications to climate reconstruction
FUN2		Speaker 2	Luigi Ippoliti	A simple spatio-temporal model with principle splines
FUN2		Speaker 3	Rosalba Ignaccolo	Data Fusion for functional data
FUN3	Spatial data analysis and partial differential equations	Organizer	Laura Sangalli	
FUN3		Speaker 1	Ming-Jun Lai	Convergence Analysis of Penalized Least Squares Data Fitting Splines
FUN3		Speaker 2	Guannan Wang	Spatial semiparametric models for data over complex domain
FUN3		Speaker 3	Finn Lindgren	Simultaneous modelling and estimation of climate and weather

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FUN4	Functional Data Analysis for Space-time Sensor data	Organizer	Claire Miller and Surajit Ray	
FUN4		Speaker 1	Amira El Ayouty	Testing stationarity of functional time series
FUN4		Speaker 2	Ruth O'Donnel	Assessing coherence of global lake water quality using functional data analysis
FUN4		Speaker 3	Laura Sangalli	Modeling spatially dependent functional data by regression with differential regularization
FUN5	Spatial analysis of Complex and Object data I	Organizer	Piercesare Secchi and Laura Sangalli	
FUN5		Speaker 1	Thomas Romary	Covariance models for large spatial datasets and their inference
FUN5		Speaker 2	Davide Pigoli	Inferring Accents from Geo-localized Acoustic Speech Recordings I
FUN5		Speaker 3	Shahin Tavakoli	Inferring Accents from Geo-localized Acoustic Speech Recordings II
FUN5		Speaker 4	Alessandra Menafoglio	Kriging for non-stationary object data through Random Domain Decomposition
FUN6	Space-time and functional approaches for partially observed data	Organizer	Laura Sangalli and Claire Miller	
FUN6		Speaker 1	Surajit Ray	An integrated framework for analyzing spatially correlated functional data
FUN6		Speaker 2	Johan Strandberg	Prediction of Spatio-Temporal Data: A Comparative Study of Two Kriging Approaches
FUN6		Speaker 3	Francesca Di Salvo	Missing data in space-time: long gaps imputation based on functional data analysis
FUN8	Smart Statistics: cities, mobility, and society	Organizer	Simone Vantini	
FUN8		Speaker 1	Valeria Fedeli	Urban change and BIGDATA analysis: methodological challenges to urban theory
FUN8		Speaker 2	Giovanni Azzone	E-mobility infrastructure for supporting private mobility in Italy
FUN8		Speaker 3	Jacopo di Iorio	Urbanscope: functional biclustering of Milan mobility patterns
FUN8		Speaker 4	Matteo Fontana	Functional Data Analysis for Energy and Behavioural analytics

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INF1	Inference on Gauss Markov Random Fields	Organizer	Luigi Ippoliti	
INF1		Speaker 1	Mattia Molinaro	A characterization of the valid parameter space of large multivariate GMRFs
INF1		Speaker 2	Luca Romagnoli	Recursive structure of Multivariate Gaussian Markov random fields
INF1		Speaker 3	Fedele Greco	Prior specification in random effect models
INF2	Entropy measures and their applications	Organizer	Giovanna Jona Lasinio and Alessio Pollice	
INF2		Speaker 1	Marco Rosoldi	Quantifying random uncertainty and redundancy in water vapour time series using entropy theory
INF2		Speaker 2	Linda Altieri	The use of spatial information in entropy measures
INF2		Speaker 3	Fabio Divino	Global Measures of Entropy and Similarity for Genetic Sequences Data
INF3	Inference and modelling of complex systems	Organizer	Leticia Ramirez-Ramirez	
INF3		Speaker 1	Heikki Haario	On-line adaptation of agent-based disease simulation
INF3		Speaker 2	Anna Shcherbacheva	From in-situ to continuous modelling of mosquito biting rates
INF3		Speaker 3	Aleksandr Bibov	Low-memory filtering for high-dimensional satellite data time series
INF3		Speaker 4	L. Leticia Ramirez-Ramirez	Forecasting of cases for climate sensitive mosquito-borne diseases using traditional and online-media information
ST1	Spatio-temporal modelling for environment	Organizer	Liliane Bel	
ST1		Speaker 1	Maxime Beauchamp	Spatio-temporal kriging for air quality forecasting
ST1		Speaker 2	Nicolas Desassis	Conditional simulation of Gaussian spatio-temporal random field with specified covariance, based on the SPDE approach.
ST1		Speaker 3	Stephane Girard	Object-based classification of grassland management practices from high resolution satellite image time series with Gaussian mean map kernels

Session Tag	Session title	Role	Name	Presentation Title
ST2	Recent Advances in Spatial and Spatio-Temporal Models	Organizer	Hsin-Cheng Huang	
ST2		Speaker 1	Ruey Tsay	Spatio-temporal models with space-time interaction and their applications to air pollution data
ST2		Speaker 2	Nan-Jung Hsu	Spatial pattern clustering for PM2.5 with application to anomaly detection
ST2		Speaker 3	Jun Zhu	Integration of different sources of environmental data in space and time
ST2		Speaker 4	Tonglin Zhang	Matern Space-Time Correlation Functions
ST3	Spatial Methods in Geostatistics and Ecological Statistics	Organizer	Hsin-Cheng Huang	
ST3		Speaker 1	Wen-Han Hwang	Estimation of abundance from occurrence maps
ST3		Speaker 2	Chun-Shu Chen	Local variable selection under a misspecified spatial regression model
ST3		Speaker 3	Guilherme Vieira Nunes Ludwig	On spline-based approach to spatial linear regression for geostatistical data
ST3		Speaker 4	Hsin-Cheng Huang	Spatial Prediction of Fine Particulate Matter in Taiwan
ST4	Complex space-time modeling and functional analysis for probabilistic forecast of seismic events	Organizer	Renata Rotondi and Giada Adelfio	
ST4		Speaker 1	Giada Adelfio	Spatio-temporal log-Gaussian Cox processes on earthquake events
ST4		Speaker 2	Jorge Mateu	Two-factor experiment analysis for the replicated marked point patterns
ST4		Speaker 3	Ilaria Spassiani	On the use and applicability of the modified Omori law
ST4		Speaker 4	Elvira Romano	Functional depth function for the seismic waves ordering
ST6	Advances in Spatial and Temporal Statistics	Organizer	Marc Genton	
ST6		Speaker 1	David Bolin	Multivariate Type-G Random Fields
ST6		Speaker 2	Ying Sun	Visualization and Assessment for Properties of Spatio-temporal Covariances
ST6		Speaker 3	Stefano Rizzelli	Inference Methods for Asymptotically Independent Samples of Extremes
ST6		Speaker 4	Alessandro Zini	Testing isotropy for spatial processes

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ST7	New Developments in Methods for Spatial and Spatiotemporal Data	Organizer	Murali Haran	
ST7		Speaker 1	Erin Schliep	Joint point pattern modeling for species co-occurrence using camera trap data
ST7		Speaker 2	Murali Haran	Combining a glacier dynamics model with multiple surface data
ST7		Speaker 3	Jonathan Stroud	Adaptive Ensemble Kalman Filters for Online Bayesian State and Parameter Estimation
ST7		Speaker 4	Gabriel Huerta	Spatio-temporal modeling of heavy tailed data
TS1	Advances in time series analysis for environmental monitoring	Organizer	Vyacheslav Lyubchich	
TS1		Speaker 1	Abdel El-Shaarawi	Bivariate Negative Binomial Distribution for Modelling Correlated Count Data
TS1		Speaker 2	Marcelo Olivera	Extreme Weather Events and Car Accidents in Mexico
TS1		Speaker 3	Wesley Burr	Lag-Adjusted Models for Air Pollution Time Series
TS3	Recent advances in temporal analysis of environment related changes	Organizer	Renjun Ma	
TS3		Speaker 1	Grace Chiu	Longitudinal modelling of crop root physiology as a breed-specific spatial response to environmental conditions
TS3		Speaker 2	Yuehua Wu	Detection of new substantial influences in spatio-temporal data
TS3		Speaker 3	Ying Zhang	A Leslie matrix simulation model for modelling wildlife age-specific harvest data