ITISE 2018

PROGRAM

19th-21th September, 2018
Granada (SPAIN)

ITISE 2018 Short Program

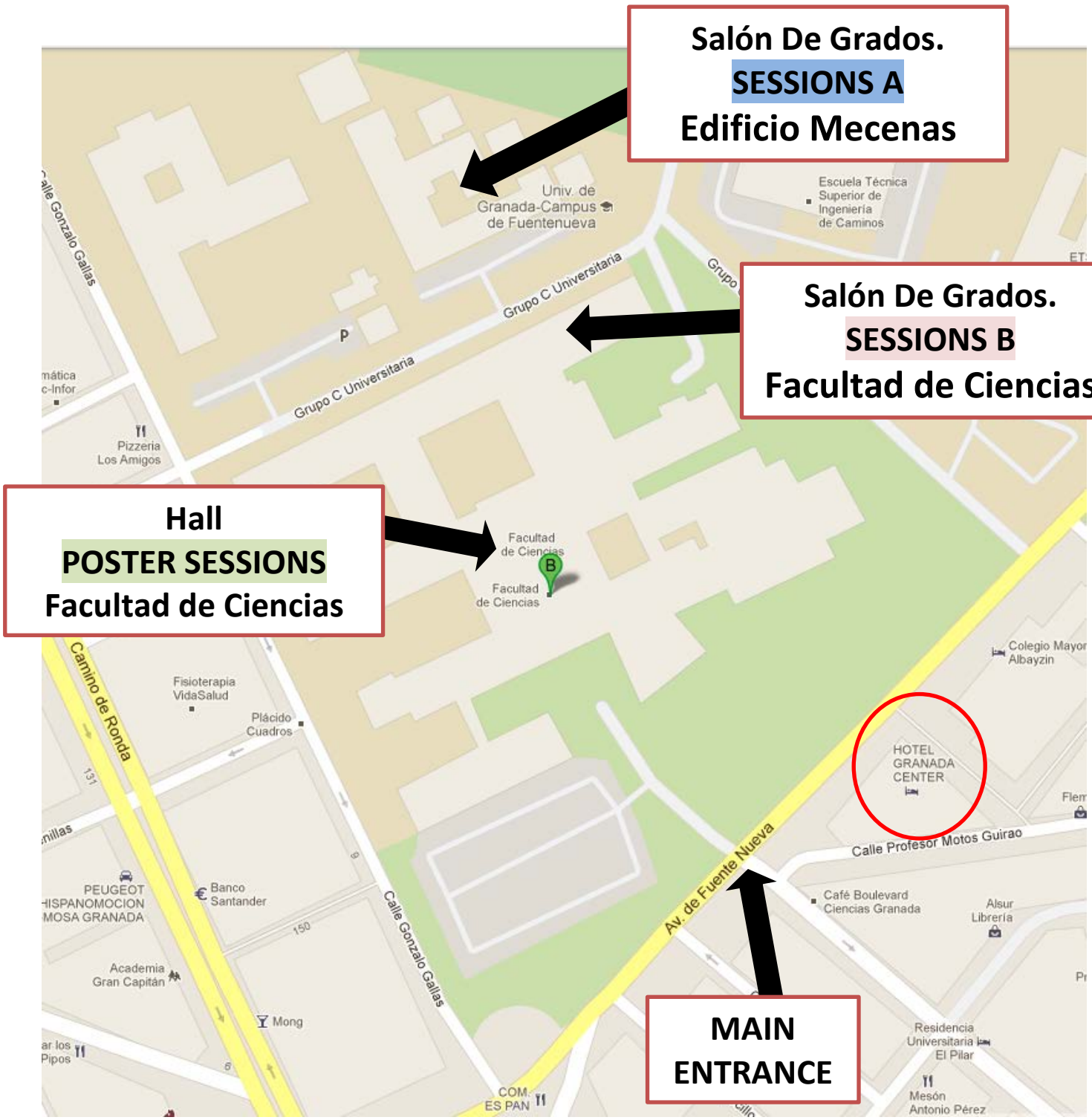
Wednesday, September 19, 2018		
8:00-8:30	**REGISTRATION DESK** *(start at 8h but it is opened during all the conference)*	
8:30-10:00	**Session A.1: Expert systems and recent developments with Time Series- Data**	**Session B.1: Applications in Time Series (Part. I)**
10:00-10:30	**COFFEE BREAK**	
10:30-11:30	**OPENING PLENARY LECTURE. Prof. Dr. Peter M Robinson**	
11:30-12:45	**Session A.2: Energy Forecasting**	**Session B.2: Real Macroeconomic Monitoring and Forecasting (Part. I)**
12:45-13:30	**Session A.3: Atmospheric Science Forecasting**	**Session B.3: Advanced econometric methods**
13:30-15:00	**LUNCH & COFFEE**	
15:00-16:30	**Session A.4: Health Forecasting**	**Session B.4: Econometric Models (Part.I)**
16:30-17:00	**COFFEE BREAK**	
17:00-18:00	**PLENARY LECTURE. Prof. Salah Bourennane**	
18:00-19:30	**Session A.5: Computational Intelligence methods for Time Series**	**Session B.5: Spatio-temporal brain dynamics in attention tasks**

NOTES:

- All **Sessions A** will be held in Salón de Grados, Edificio Mecenas (just 50 meters from the Facultad de Ciencias).
- All **Sessions B** will be held in Salón de Grados, Facultad de Ciencias.
- The **Poster Sessions** will be held in the Hall of Facultad de Ciencias.
- Social event (departure): Buses will be at the main entrance of Hotel Granada Center (20th September at 20:30 for the Gala Dinner at Hotel Alhambra Palace and 21th September at 15:15 for the visit to Alhambra).

Thursday, September 20, 2018		
8:00-8:30	**REGISTRATION DESK** ***(start at 8h but it is opened during all the conference)***	
8:30-10:00	**Session A.6: Forecasting performance evaluation**	**Session B.6: Applications in Time Series (Part.II)**
10:00-10:30	**COFFEE BREAK**	
10:30-11:30	**PLENARY LECTURE.** **Prof Andrew C. Harvey**	
11:30-12:45	**Session A.7: Times series analysis in geosciences**	**Session B.7: Forecasting Complex/Big data (Part. I)**
12:45-13:30	**Session A.8: Nonstationarity Time Series**	**Session B.8: Real Macroeconomic Monitoring and Forecasting (Part.II)**
13:30-15:00	**LUNCH & COFFEE**	
15:00-16:30	**Session A.9: Advanced methods in Forecasting**	**Session B.9: Econometric Models (Part.II)**
16:30-17:00	**COFFEE BREAK**	
17:00-18:00	**PLENARY LECTURE.** **Dr. Karsten Webel**	
18:00-19:00	**Session A.10: Quantum Computing**	**Session B.10: Structural Time Series Models**
19:00-20:25	**Session A.11/B.11: Poster Session.**	
20:30	**Gala Dinner at Hotel Alhambra Palace**	

Friday, September 21, 2018		
8:00-8:30	**REGISTRATION DESK** ***(start at 8h but it is opened during all the conference)***	
8:30-10:00	**Session A.12: Applications of time series for hydro-climatic data. Complex/Big Data.**	**Session B.12: Applications in Time Series (Part. III)**
10:00-10:30	**COFFEE BREAK**	
10:30-11:15	**PLENARY LECTURE.** **Univ. Prof. Dr. Robert Kunst**	
11:15-12:20	**Session A.13: Forecasting Complex/Big data (Part.II)**	**Session B.13: Financial Forecasting and Risk Analysis**
12:20-13:15	**Session A.14: Vector processes in Time Series**	**Session B.14: Nonparametric and Functional Methods in Time Series**
13:15-14:00	**CLOSING PLENARY LECTURE.** **Prof. Dr. Uwe Hassler**	
14:00-15:15	**FREE TIME**	
15:15	**Visit to the Alhambra**	


Salón De Grados.
SESSIONS A
Edificio Mecenas
Salón De Grados.
SESSIONS B
Facultad de Ciencias
Hall
POSTER SESSIONS
Facultad de Ciencias
MAIN
ENTRANCE
Univ. de Granada-Campus de Fuentenueva
Escuela Técnica Superior de Ingeniería de Caminos
Grupo C Universitaria
Facultad de Ciencias
Pizzeria Los Amigos
Fisioterapia VidaSalud
Plácido Cuadros
Camino de Ronda
Calle Gonzalo Gallas
Av. de Fuente Nueva
Calle Profesor Motos Guirao
HOTEL GRANADA CENTER
Colegio Mayor Albayzín
Café Boulevard Ciencias Granada
Alsur Librería
Residencia Universitaria El Pilar
Mesón Antonio Pérez
Banco Santander
Academia Gran Capitán
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ITISE 2018 FULL PROGRAM

Wednesday, September 19, 2018

Session A.1: Expert systems and recent developments with Time Series- Data

Chairman: Dr. Kalle Saastamoinen

Robust autocovariance estimation from the frequency domain
Higor Henrique Aranda Cotta, Valdério Reisen, Pascal Bondon and Celine Levy-Leduc

Penalty terms for estimation of ARMA models:A Bayesian inspiration
Helgi Tómasson

Semi-Online Imagined Speech classification from EEG data based on DWT and Random Forest
Luis Alfredo Moctezuma Pascual

A Simulation of a Custom Inspection in the Airport
Kalle Saastamoinen, Petteri Mattila and Antti Rissanen

Complex networks of scalar time series using a data compression algorithm
Debora Correa, David Walker and Michael Small

Computation and validation of wind and solar time series based on global reanalysis
Marta Victoria, Gorm B. Andresen and Martin Greiner

Session B.1: Applications in Time Series (Part. I)

Chairman: Dr. Stanislaw Jankowski and Dr. Sara Ahmadi-Abhari (tentative)

A Study with NDVI Time Series of the Brazilian Caatinga
Claudionor Silva, Aracy Araujo and Sérgio Machado

Characterizing Market Behavior through Risk Forecasts: a Powerful VaR Backtesting
Marta Malecka

The Long-term memory effects of the Baltic Dry Index
Jose Ramon San Cristobal

Forecasting Peak Period of Travel Time
Béla Paláncz, Jianhong Xia and Yuchen Liu

Transfer function modeling of constant work-rate tests in patients with COPD
Joren Buekers, Hanne Cryns, Patrick De Boever, Emiel F.M. Wouters, Martijn A. Spruit, Jan Theunis and Jean-Marie Aerts

Adaptive R-peak Detection Using Empirical Mode Decomposition
Christina Kozia, Randa Herzallah and David Lowe

PLENARY LECTURE:
Prof. Dr. Peter M Robinson

Tooke Professor of Economic Science and Statistics Department of Economics, London School of Economics

Session A.2: Energy Forecasting

Chairman: Dr. Young Truong and Dr. Emina Junuz (tentative)

Understanding the behaviour of energy prices in Brazil
Abdinardo Moreira Barreto de Oliveira and Anandadeep Mandal

Time series Analysis for Re-Commissioning of Building Service installations
Wim Zeiler

Prediction of Current by Artificial Neural Networks in a Substation in order to Schedule Thermography
Per Westerlund and Ilias Dimoulkas

Adaptive Methods for Energy Forecasting of Production and Demand of Solar Assisted Heating Systems
Viktor Unterberger, Thomas Nigitz, Mauro Luzzu, Daniel Muschick and Markus Gölles

Short-term forecast of wind turbine production whith machine learning methods: direct approach and indirect approach
Mamadou Dione and Eric Matzner Lober

Session B.2: Real macroeconomic monitoring and forecasting (Part. I)

Chairman: Dr. Fakhri Hasanov

Permutation entropy as the measure of globalization process.
Janusz Mikiewicz

Estimating macroeconomic uncertainty from surveys – a mixed frequency approach
Jeffrey Sheen and Ben Wang

External Migration as a Factor of Economic Growth: Econometric Analysis for CIS Countries
Kseniya Bondarenko

Business Cycle Synchronizaiton: The effects of Trade, Sectoral and financial linkages
Kanya Paramaguru

Session A.3: Atmospheric Science Forecasting

Chairman: Dr. Valerie Livina and Dr. Eliza Szczechla

Localized Online Weather Predictions with Overnight Adaption
Michael Zauner, Michaela Killian and Martin Kozek

Storm characterization using a BME approach
Manuel Cobos, Andrea Lira-Loarca, George Christakos and Asunción Baquerizo

Air Pollution Forecasting using Machine Learning Techniques
Marijana Cosovic and Emina Junuz

Session B.3: Advanced econometric methods

Chairman: Dr. Jose Ramon San Cristobal and Dr. Maud Doumergue

Forward Regression with Discrete and Continuous Wavelet Time-Frequency Window -An application to the Market Line-
Roman Mestre and Michel Terraza

Using subspace methods to model long memory processes
Dietmar Bauer

Changepoints to Improve Forecasts
Jamie-Leigh Chapman, Rebecca Killick and Idris Eckley

Session A.4: Health Forecasting

Chairman: Dr. Daniel Muschick

ProMoBed: a forecasting and simulation model for estimating future hospital bed capacity
Marlies Van der Wee, Timo Latruwe, Sofie Verbrugge, Pieter Vanleenhove and Henk Vansteenkiste

Panel Data Unit Root Tests on the Income-Health Relationship of the Mexican States
Vicente German-Soto and Martha Elena Fuentes Castillo

Forecasted trends for cardiovascular disease in England and Wales to 2040 and impact of reduction in smoking prevalence: a probabilistic Markov modelling study
Sara Ahmadi-Abhari, Piotr Bandosz, Maria Guzman-Castillo, Hannah Whittaker, Martin Shipley, Mika Kivimäki, Simon Capewell, Martin O'Flaherty and Eric Brunner

Forecasting in qPCR procedure by means of hyperbolastic stochastic model
Antonio Barrera, Patricia Román-Román and Francisco Torres-Ruiz

Effects of electrical stimulation on phase synchronization of cortical tissue as a measure of excitability of epileptic tissue
Farrokh Manzouri, Matthias Duempelmann and Andreas Schulze-Bonhage

Using time series analysis for challenging breast lesion detection and classification in DCE-MRI
Ignacio Alvarez, Anthony Bagnall, Javier Ramirez, Juan Manuel Gorriz, Katja Pinker, Maria Adele Marino, Daly Avendaño and Anke Meyer-Baese

Session B.4: Econometric models (Part.I)

Chairman: Dr. Bauer Dietmar and Dr. Svetlana Polukoshko

Volatility Estimation when Observations Are Missing
Natalia Bahamonde, Hamdi Raissi and Genaro Sucarrat

On the computation and application of M-estimators and its bootstrapped version in GARCH models
Hang Liu and Kanchan Mukherjee

Relationships between Shanghai, Shenzhen and Hong Kong Stock Markets considering the split-share reform
Yang Mestre-Zhou, François Benhmad and Roman Mestre

Economic and Environmental Benefits Based on Sce-nario Analysis in Transportation Sector: A Case Study of Kuwait
Sarah Alosaimi and K. J. Sreekanth

Tourism – the factor of employment sustainability in Croatian economy
Justin Pupavac and Drago Pupavac

PLENARY LECTURE:
Prof. Salah Bourennane
Full Professor and he held also the position of the Dean of Research at the Ecole Centrale de Marseille, France

Session A.5: Computational Intelligence methods for Time Series

Chairman: Dr. Hector Pomares and Dr. German Gutierrez

Enhancement of time series analysis by including label variables
José Carlos García-García, Ricardo García-Ródenas and Francisco P. Romero

Direct and Recursive Strategies for Multi-Step Ahead Wind Speed Forecasting
Sameer Al-Dahidi and Hisham Elmoaqet

Identification of multiregime periodic autoregressive models by genetic algorithms
Domenico Cucina, Manuel Rizzo and Eugen Ursu

Change Detection for Streaming Data using Wavelet-based Least Square Density Difference
Nenad Mijatovic, Rana Haber, Mark Moyou, Anthony O. Smith and Adrian M. Peter

Fuzzy time series applied to short term load forecasting: analysis of applications and extensions
Guilherme Costa Silva, João Luis R. Silva, Adriano Lisboa, Douglas Vieira and Rodney Saldanha

Selection of neural network for crime time series prediction by Virtual Leave One Out tests

Stanislaw Jankowski, Zbigniew Szymaski, Zbigniew Wawrzyniak, Pawe Cichosz, Eliza Szczechla and Radosaw Pytlak

Data Mining Applied for Performance Index Prediction in Highway Long Segment Maintenance Contract

Andri Irfan, Susanti Handayani and Merry Lita

Novel order patterns recurrence plot-based quantification measures to unveil deterministic dynamics from stochastic processes

Shuixiu Lu, Sebastian Oberst, Guoqiang Zhang and Zongwei Luo

Session B.5: Spatio-temporal brain dynamics in attention tasks

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Chairman: Dr. César German Castellanos Dominguez

On Statistical Inference for Independent Colored Sources Analysis

Young Truong and Rachel Nethery

Relevance analysis in spatio-spectral components based on Permutation Entropy supporting MI discrimination

Juan Camilo López Montes, David Cárdenas Peña and German Castellanos Dominguez

Entropy-based relevance selection of independent components supporting motor imagery tasks

David Felipe Luna Naranjo, David Cardenas Peña and German Castellanos Dominguez

Analysis of interchannel phase connectivity for EEG event-related potentials using auditory oddball paradigm in attention tasks

Jorge Ivan Padilla Buritica

Sub-band brain mapping based on a Multivariate Wavelet Packet Decomposition

Pablo Andrés Muñoz Gutiérrez, Eduardo Giraldo, Juan David Martinez Vargas and German Castellanos Dominguez

Localizing the Focal Origin of Epileptic Activity using EEG Brain Mapping based on Empirical Mode Decomposition

Pablo Andrés Muñoz Gutiérrez, Eduardo Giraldo, Marta Molinas and Maximiliano Bueno López

Thursday, September 20, 2018

Session A.6: Forecasting performance evaluation

Chairman: Dr. Jean-Philippe Montillet and Dr. Carlos Jeronimo (tentative)

Assessing the Uncertainty in Central Banks' Inflation Outlooks
Guido Schultefrankenfeld and Malte Knueppel

Performance Assessment of A short–Term Travel Forecasting Scheme for Multi-Lane Highway
Jamal Raiyn

On the limits of probabilistic prediction in nonlinear time series analysis
Jose Maria Amigo, Yoshito Hirata and Kazuyuki Aihara

Evaluation of regression and judgement-incorporated forecasting processes using hybrid MCDM models
Yvonne Badulescu and Naoufel Cheikhrouhou

Outlier Identication in Multivariate Time Series: Boilers Case Study
Joana Ribeiro, Mário Antunes, Diogo Gomes and Rui Aguiar

Realized volatility in the presence of structural breaks: which forecast?
Giuseppina Albano, Davide De Gaetano

Session B.6: Applications in Time Series (Part.II)

Chairman: Dr. Radoslaw Pytlak and Dr. Cecilia Xia

Experimental Comparison and Tuning of Time Series Prediction for Telecom Analysis
Andrè Pinho, Pedro Furtado, Helena Silva and Ricardo Filipe

Multivariate forecasting of extreme wave climate and storm evolution
Andrea Lira-Loarca, Manuel Cobos, Asunción Baquerizo and Miguel A. Losada

Pattern similarity-based load forecasting applied to unit commitment problem
Guilherme Costa Silva, Adriano Lisboa, Douglas Vieira and Rodney Saldanha

Modified Granger Causality in Selected Neighborhoods
Martina Chvosteková

State of Charge Depended Modeling of an Equivalent Circuit of Zinc Air Batteries Using Electrochemical Impedance Spectroscopy
Andre Loechte, Ole Gebert, Ludwig Horsthemke, Daniel Heming and Peter Gloesekoetter

Cryptanalysis of a Chaos Based Encryption Algorithm for Secure Communication
Salih Ergun

PLENARY LECTURE:
Prof Andrew C. Harvey

Emeritus Professor of Econometrics in the Faculty of Economics, University of Cambridge, and a Fellow of Corpus Christi College

Session A.7: Times series analysis in geosciences

Chairman: Dr. Eulogio Pardo-Iguzquiza and Dr. Francisco Javier Rodriguez-Tovar

Local fractal analysis of time series
Eulogio Pardo-Igúzquiza, F. J. Rodríguez-Tovar and J. Sanchez-Morales

Time series analysis with a Gamma probability density function of airborne fungal spores in Catalonia
Andrés M. Vélez-Pereira, Concepción De Linares, Miguel-Angel Canela and Jordina Belmonte

Discussion on Geodetic Times Series of Mixed Spectra and Levy Processes
Jean-Philippe Montillet and Kegen Yu

Tipping point analysis and its applications in geophysics, environmental sciences, and smart sensor systems
Valerie Livina

Session B.7: Forecasting Complex/Big data (Part. I)

Chairman: Dr. Bondon Pascal and Dr. Jose Maria Amigo Garcia

Characterization and detection of potential fraud taxpayers in Personal Income Tax using data mining techniques
Maria Del Camino González Vasco, Maria Jesús Delgado Rodríguez and Sonia de Lucas Santos

Detecting Anomalous Pattern-of-Life from Human Trajectory Data
Yazan Qarout and David Lowe

Model-based Data Exploration
Hans-Ulrich Kobialka, Daniel Paurat and Lisa Schrader

Forecasting of daily reference evapotranspiration for oceanic climate using autoregressive Hilbertian process
Rousseau Tawegoum, Besnik Pumo and Pierre Santagostini

Modeling smartphone app data for learning time-varying individual location densities
Francesco Finazzi and Lucia Paci

Session A.8: Nonstationarity Time Series

Chairman: Dr. Claudia Santos and Dr. Nicolas Beldiceanu

Identification of nonstationary processes using noncausal bidirectional lattice filtering
Maciej Niedzwiecki and Damian Chojnacki

CUSUM Based Ratio Tests for Parameter Constancy: With Application to Variance Stability
Antonio Rubia, Uwe Hassler, Mehdi Hosseinkouchack and Paulo Rodrigues

A New Estimation Method for an Identifiable Fractional Vector Error Correction Model
Katarzyna Lasak and Federico Carlini

Identification Algorithms Based on the Associative Search of Analogs and Association Rules
Natalia Bakhtadze, Vladimir Lototsky and Valery Pyatetsky

Session B.8: Real Macroeconomic Monitoring and Forecasting (Part.II)

Chairman: Dr. Concepcion Gonzalez and Dr. Jamall Raiyn(tentative)

The impact of the increased domestic energy prices on the Saudi Arabian economy. Insights from KGEMM.
Fakhri Hasanov, Frederic Joutz and Jeyhun Mikayilov

Yield Curve Modeling with Macro Factors
András Bebes, Dávid Tran and László Bebesi

Ranking multi-step system forecasts invariant to linear transformations
Håvard Hungnes

Session A.9: Advanced methods in Forecasting

Chairman: Dr. Agnieszka Gil-Swiderska

Conditional Heteroskedasticity in Long Memory Model 'FIMACH' for Return Volatilities in Equity Markets
A.M.M. Shahiduzzaman Quoreshi and Sabur Mollah

Probabilistic forecasting and simulation of electricity prices
Peru Muniain and Florian Ziel

Computing Environment for Forecasting based on System Dynamics Models
Radoslaw Pytlak, Damian Suski, Tomasz Tarnawski, Zbigniew Wawrzyniak, Tomasz Zawadzki and Pawe Cichosz

The Contrast Between Management Consulting and Outsourcing Management Services: A financial perspective
Carlos Jerónimo, Leandro Pereira, José Santos and Nelson Antonio

FPGA-based accelerator design for Echo-State networks
Jose L Rossello, Miquel L. Alomar, Erik Sebastian Skibinsky Gitlin, Christiam F Frasser, Vicente Canals, Eugeni Isern, Fabio Galan Prado, Alejandro Morán and Miquel Roca

Stacked LSTM Snapshot Ensembles for Time Series Forecasting
Sascha Krstanovic and Heiko Paulheim

Session B.9: Econometric models (Part.II)

Chairman: Dr. Scaglione Miriam

Implications for Aggregate Inflation of Sectoral Asymmetries: an empirical application
Hannu Koskinen and Jouko Vilmunen

Demand effects of the introduction of the seasonal lift pass Magic Pass
Martin Falk and Miriam Scaglione

Testing for Differences in Forecast-Error Dynamics in Path Forecasts
Andrew Martinez

What can drive economic growth in Russia? Mid-term growth scenarios
Svetlana Balashova, Vladimir Matyushok and Inna Lazanyuk

Determining the cointegration rank using a Residual-based Procedure
Antonio Aznar

On controllability conditions in Extended Yule-Walker methods for VARMA models
Celina Pestano-Gabino, Concepcion Gonzalez-Concepcion and Candelaria Gil-Fariña

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PLENARY LECTURE:
Dr. Karsten Webel
Deutsche Bundesbank, Central Office, Directorate General Statistics Germany.

Session A.10: Quantum Computing

Chairman: Dr. Bernd Burchard and Dr. Peter Gloesekoetter

Quantum computing and quantum communication networks
Jens Eisert

A scheme to realize a quantum computer based on coupled NV and P1 centers in diamond.
Jan Meijer

Point Function Analysis and a Hypothesis on the Origin of Quantum Mechanics
Bernd Burchard

Blueprint for nanoscale NMR
Ilai Schwartz, Joachim Rosskopf and Martin Plenio

Session B.10: Structural Time Series Models

Chairman: Dr. Maciej Niedzwiecki and Dr. Helgi Tomasson

Dynamic Bayesian smooth transition autoregressive models applied to hourly electricity load in southern Brazil
Alvaro Faria and Alexandre Santos

CP-based cloud workload annotation as a preprocessing for anomaly detection using deep neural networks
Gilles Madi Wamba and Nicolas Beldiceanu

Time series modelling with MATLAB: the SSpace toolbox
Diego J. Pedregal, Marco A. Villegas, Diego Villegas and Juan R. Trapero

Multivariate INAR processes - Periodic case
Cláudia Santos, Isabel Pereira and Manuel Scotto

Session A.11/B.11: Poster Session

Chairman: Dr. Fernando Rojas and Dr. Olga Valenzuela

The Impact of Feedback Trading on Option Prices
Thorsten Lehnert

Physical Laws Extracted from Statistical Analyses of Solar Magnetic Elements
Mohsen Javaherian and Hossein Safari

A robust alternative for the estimation of autocovariance from the frequency domain for multivariate processes
Higor Henrique Aranda Cotta, Valdério Reisen, Pascal Bondon and Céline Lévy-Leduc

Changes in rapeseed canopy spectral reflectance under different cultivars and nitrogen levels
Hong-Xin Cao, Wei-Tao Chen and Bao-Jun Zhang

Application of Deep-Learning Algorithm for Inflow Series Forecasting in South Korea
Jun-Haeng Heo, Ju-Young Shin and Taereem Kim

Evaluation of Atmospheric Particulate Matter (PM10) Time Series in Badajoz, 2010-2015
Selena Carretero-Peña, Conrado Miró Rodríguez and Eduardo Pinilla-Gil

Long-term (2010-2015) tropospheric ozone temporal series in Badajoz (Spain). Trend and seasonal behavior
María Cerrato Alvarez, Conrado Miró Rodríguez and Eduardo Pinilla-Gil

Verification on winter rapeseed (Brassica napus L.) aboveground dry weight and yield models under waterlogging stress at anthesis
Hong-Xin Cao, Tai-Ming Yang and Bao-Jun Zhang

On the Impact of Shale Oil Revolution in Oil-Dollar Comovement
Francois Benhmad

Forecasting inflation with long-short term memory recurrent neural networks: the Colombian case
Andres C. Serna, Javier G. Diaz and Julio Alonso

Hybrid forecasting methods applied to the Earth's rotation and Radon time-series for anomalies detection

Fabrizio Ambrosino, Lenka Thinová, Miloš Briestenský and Carlo Sabbarese

Analyses of the time series based on atmospheric energy budget determination for the purpose of budget prognosis with ARMA method

Monika Birylo

Effects of the levels of soil water deficit, duration of soil water shortage on different rice cultivars

Daokuo Ge, Hongxin Cao and Yuwang Yang

The role of oil prices on the Russian business cycle

Yi Zheng and Harri Pönkä

Seasonal Variations of Sea Level in the Polish Coastal Zone from Satellite Altimetry and Tide Gauge Data

Katarzyna Pajak, Monika Birylo, Joanna Kuczynska-Siehien and Kamil Kowalczyk

The Performance of the Wavelet Halt-Winters Hybrid Model in Forecasting the Groundwater Level Time Series

Hamid Reza Nassery, Ali Mirarabi, Mohammad Nakhaei and Farshad Alijani

Tipping point analysis and its applications in geophysics, environmental sciences, and smart sensor systems

Valerie Livina

Combination of neural network and wavelet to predict suspended sediment load in river by using data clustering

Samir Benghérifa, Abd El Wahab Lefkir and Abd El Malek Bermad

SSA Approach in Investigation and Forecasting of Hydrological Time Series

Svetlana Polukoshko

Using a naive Bayes classifier to explore the factors driving the harmful dinoflagellate Alexandrium minutum dynamics

Wafa Feki, Asma Hamza, Hasna Njah, Nouha Barraj, Mabrouka Mahfoudi, Ahmed Rebai and Malika Bel Hassen

Modeling Global Radiation in Kuwait

Shafiqah Alawadhi

The predictability of heat-related mortality in Prague, Czech Republic during summer 2015 – A comparison of selected thermal indices

Aleš Urban, David M. Hondula, Hana Hanzlíková and Jan Kysely

Power laws in stock market and fractal complexity of S&P500 and DAX

Anna Krakovská

Oracle properties and applications of robust penalized and subset regression in the presence of outliers

Anam Zakir and Sohail Chand

Selection of Geographical Factors Using the Random Forest Analysis Method for Developing Site Index of Pinus densiflora stands in Republic of Korea

Hee-Jung Park, Se-Ik Park, Hyun-Soo Kim, Eun-Seong Lee, Hyun-Jun Kim and Sang-Hyun Lee

The Non-Stationary Unconstrained BINAR(1) Process with Geometric Marginals.

Yuvraj Sunecher, Vandna Jowaheer, Naushad Mamode Khan, Isven Veerasawmy and Azmi Muslun

Characterising Dependency in Computer Networks Using Spectral Coherence

Alexander Gibberd, Jordan Noble and Edward Cohen

Time Series Analysis as a Powerful Tool in Space Weather Event Studies

Agnieszka Gil-Swiderska

The Utility of POI Data for Crime Prediction

Pawel Cichosz, Zbigniew Wawrzyniak, Radoslaw Pytlak, Grzegorz Borowik, Eliza Szczechla, Pawel Michalak, Dobieslaw Ircha, Wojciech Olszewski and Emilian Perkowski

Analyzing credit indices time series: How random are trades arrival times?

Achraf Bahamou, Maud Doumergue and Philippe Donnat

Empirical Prediction of Northeast Atlantic Storm Activity

Oliver Krueger, Frauke Feser and Ralf Weisse

Tests for Segmented Cointegration: An Application to US Governments Budgets

Paulo Rodrigues and Luis Martins

One-pass Incremental Learning of Temporal Patterns on a Budget

Koki Ando and Koichiro Yamauchi

Nonlinear relationship detection using pseudocorrelation

Jozef Jakubík

Highlighting relevant EEG-based brain connectivity patterns from an MI task

Viviana Gómez Orozco, Andres Marino Alvarez, Paula Marcela Herrera Gómez, César Germán Castellanos Domínguez and Álvaro Ángel Orozco Gutiérrez

Application of Random Forest time series model and multivariate adaptive regression spline in Short-term electric load forecasting

Leili Tapak, Omid Hamidi and Ramezan Ali Naghizadeh

Automatic detection of sleep disorders: Multi-class automatic classification algorithms based on Support Vector Machines

David López-García, María Ruz, Javier Ramírez Pérez de Inestrosa and Juan Manuel Górriz Sáez

Relevance of Filter-Banked Features using Multiple Kernel Learning for Brain Computer Interfaces

Daniel Guillermo García-Murillo, David Cárdenas-Peña and German Castellanos-Dominguez

Multiple Instance Learning Selecting Time-Frequency Features for Brain Computing Interfaces

Julian Camilo Caicedo Acosta, Luisa Fernanda Velasquez-Martinez, David Cardenas-Peña and German Castellanos-Dominguez

Event Study in Tehran Stock Exchange: Central Bank Intervention and Market Impact Reaction

Gholamreza Keshavarz Haddad and Hadi Heidari

Influence of time-series extraction on binge drinking interpretability using functional connectivity analysis

Jorge Ivan Padilla Buritica

MoCap multichannel time series representation and relevance analysis by kernel adaptive filtering and multikernel learning oriented to action recognition tasks

Juan Diego Pulgarin-Giraldo, Andres Marino Alvarez-Meza, Steven Van Vaerenbergh, Ignacio Santamaría and German Castellanos

Forecast Model for Current, Wave and Wind Climate at the Danish Test Site for Wave Energy, DanWEC

Amélie Têtu

Density Forecast Comparison For Disagreggated Macroeconomic Random Variables Using Bayesian VAR Models, Bayesian Global VAR Models and Large Bayesian VAR Models With Stochastic Volatililty

Roberto Arsenal and Miguel Ángel Gómez Villegas

Simple estimators and inference for higher-order stochastic volatility models

Md Nazmul Ahsan and Jean-Marie Dufour

Entropy-based Channel Selection using Supervised Temporal Patterns in MI Tasks

Luisa Velasquez, Frank Zapata, David Cardenas and German Castellanos

Friday, September 21, 2018

Session A.12: Applications of time series for hydro-climatic data. Complex/Big Data.

Chairman: Dr. Guido Schultefrankenfeld and Dr. Miró Rodríguez Conrado L. (tentative)

Maximum Entropy Methodologies in Large-Scale Data
Maria Da Conceição Costa and Pedro Macedo

Forecasting time series using topological data analysis
Nailia Gabdrakhmanova

Forecasting Subtidal Water Levels and Currents in Estuaries. Assessment of Management Scenarios.
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Forecasting health of complex IT systems using system log data
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PLENARY LECTURE:
Univ. Prof. Dr. Robert Kunst
Professor of Economics at the University of Vienna and affiliated with the IHS .

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Chairman: Dr. Maria del Camino González Vasco and Dr. Kobialka Hans-Ulrich

Comparing linear and non-linear dynamic factor models for large macroeconomic datasets
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Chairman: Dr. Yusho Kagraoka

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Chairman: Dr. Diego J. Pedregal Pedregal and Dr. Abdinardo Moreira Barreto de Oliveira

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Chairman: Dr. Vladimir Lototsky and Dr. Katarzyna Lasak

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Nomeda Bratikovien

PLENARY LECTURE:
Prof. Dr. Uwe Hassler
Applied Econometrics and International Economic Policy. Goethe University Frankfurt .

Virtual Session

Chairman: Dr. Olga Valenzuela and Dr. Ignacio Rojas

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RESeT
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ATC
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UNIVERSIDAD DE GRANADA