

2nd ISNPS *June 12th - 16th, 2014, Cádiz, Spain*

SESSIONS PROGRAM

USEFUL INFORMATION

All the sessions will take place in the Conference center of Valentín Sancti Petri Hotel in Cádiz, Spain.

REGISTRATION/HELP DESK

ISNPS staff will be available in the Convention Center Hall to register participants:

| | |
|------------------------------------|--|
| Wednesday, June 11th | Thursday, 12th - Friday, 13th Sunday, 15th & Monday, 16th |
| 11:30 - 13:30hr. & 15:00 - 19:30hr | 08:15 – 19:30hr |

If there is a balance outstanding on your conference booking, you will have to settle the account before your registration pack will be issued.

During the conference your conference badge must be worn.

Staff will be available in the registration desk located in the Convention Center hall to answer any participant queries/enquiries.

PRESENTATION INSTRUCTIONS

The rooms are equipped with a PC and a computer projector. Presenters must provide to the session chair the files for the presentation in PDF (acrobat) or PPT (Powerpoint) format on a USB memory stick. This must be done 10 minutes before each session. Chairs are requested to keep the sessions on schedule. Papers should be presented in the order they are listed in the program for the convenience of attendees who may wish to go to other rooms mid-session to hear particular papers. In the case of a presenter not attending, please use the extra time for a discussion so that way the remaining papers stay on schedule. The PC in the lecturer rooms should be used for presentations. IT technician will be available during the conference and should be contacted in case of problems.

SOCIAL EVENTS

Welcome Reception

The welcome reception is included in the fee and it will take place at 20:15 in the terrace "Poniente", next to the swimming pool of Valentín Sancti Petri Hotel on Wednesday, June 11.

Gala Dinner

The conference dinner is not included in the conference fee. Please check your conference booking confirmation to find out if you have registered and paid to attend the dinner.

The gala dinner can be booked on site by 11:30am on Thursday, June 12.

Dinner will take place on Friday, June 13 in “González-Byass” cellars located in Jerez de la Frontera, one of the wineries established in Jerez since 1835. The meeting point will be at 20:00hr in the lobby of the hotel. **Staff will be requesting dinner tickets on arrival at the cellars entrance.** Return is expected about midnight.

Special dietary requirements, vegetarian and vegan meals must have all been booked as on your booking form. If you have requested a special diet, please inform the conference staff when you collect your meals.

The gala dinner includes: transportation, cellar visit and dinner. Price: €75.00

ACCOMPANYING PROGRAM

All tours are limited to a minimum number of 25 participants on a first come, first served basis. Individual tours are subject to cancellation & refund of tour fees if pre-registration is not sufficient. Onsite payments are permitted. However will not guarantee a place on the tour and they will depend on whether or not the sufficient number of tour participants has been reached at that time.

Tours can be purchased by 10:00am on the day before depart.

SHUTTLE SERVICES

Departing transfer are scheduled on the following days and times indicated below:

| June 16th Monday | June 17th Thursday |
|------------------|--------------------|
| 04:45am | 04:45am |
| 07:00am | 07:30am |
| 10:30am | 11:30am |
| 1:00pm | 3:00pm |
| 3:00pm | |
| 6:30pm | |

The meeting point will be the lobby of the Valentín Sancti Petri Hotel.

For those participants who have booked a private shuttle, we inform you will be picked-up from the lobby of the Valentín Sancti Petri Hotel two hours and a half before your flight time.

Private shuttles will be only possible to book with a minimum of 48hour notice, prior to your transfer.

ACCOMMODATION

Accommodation is not included in your conference registration.

MEALS AND REFRESHMENTS

Tea and Coffee

Coffee breaks will be served in the Convention Centre hall according to the program.

Luncheons

Luncheons in Valentín Sancti Petri Hotel should be arranged directly with the hotel. You can also check the map of the hotel area where you will find some bars and restaurants to lunch / dinner.

WIRELESS INTERNET CONNECTION

Wireless internet is available across the hotel, enabling participants to use their own laptops to connect to the internet. In addition the Second ISNPS Conference has enabled a specific Wi-Fi network for Second ISNPS participants in the Convention Center. **Password: ISNPS2014**

CONVENTION CENTER – VALENTIN SANCTI PETRI

CONVENTION CENTRE VALENTIN SANCTI PETRI



PARALLEL SESSIONS:

- Room 1: "Levante"
- Room 2: "Cierzo"
- Room 3: "Gregal"
- Room 4: "Cantabria"
- Room 5: "Asturias"
- Room 6: "Castilla"
- Room 7: "León"

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PROGRAM OVERVIEW - Second ISNPS Conference

| | Wednesday, June, 11 | Thursday, June, 12 | Friday, June, 13 |
|-----------------|---------------------|--|--|
| 08:00 - 09:00 | | | Advisory and Charting Committees Meeting |
| 09:00 - 10:00 | | Plenary Session I Robert Tibshirani | Invited sessions |
| 10:00 - 11:00 | | Special Invited Session I Peter Rousseeuw Contributed sessions | |
| 11:00 - 11:30 | | Coffee break | Coffee break |
| 11:30 - 12:30 | REGISTRATION OPEN | Plenary Session II Peter Bühlmann | Invited sessions |
| 12:30 - 13:30 | | Special Invited Session II Irène Gijbels Contributed sessions | |
| 13:30 - 15:00 | | Lunch | Lunch |
| 15:00 - 17:00 | REGISTRATION OPEN | Invited sessions | Invited sessions |
| 17:00 - 17:30 h | | Coffee break | Coffee break |
| 17:30 - 19:30 | | Invited sessions | Invited sessions |
| 20:15 - 21:45 | Welcome Reception | | |

| Saturday, June, 14 | Sunday, June, 15 | Monday, June,16 |
|--|---|--|
| Day Off | | |
| | Plenary Session III Steve Marron | Invited sessions |
| | Special Invited Session III Montse Fuentes Contributed sessions | |
| | Coffee break | Coffee break |
| | Plenary Session IV Marc Hallin | Special Invited Session V Qiwei Yao Invited sessions |
| | Special Invited Session IV Robert Serfling Contributed sessions | |
| | Lunch | Lunch |
| | Invited sessions | Invited sessions |
| | Coffee break | Coffee break |
| | Invited sessions | Invited sessions |
| Advisory and Charting Committees Meeting | | |

Detailed Program

Thursday, June 12th, 2014

9:00 - 10:00 **Plenary Lecture I: Robert Tibshirani - Stanford University**

Room 1.01 The Lasso: a brief review and a new significance test
“Doñana”

10:00 - 11:00 **Special Invited Session I: Peter Rousseeuw - KU Leuven**

Room 1.02 From multivariate depth to functional depth
“Doñana”

Room 1 **Contributed Session: Functional data**
“Levante” **Session chair: Ricardo Fraiman**

1.03 Explicit optimal rules for functional classification
José Luis Torrecilla, Antonio Cuevas & José R. Berrendero

1.04 The Mahalanobis distance for functional data with applications to classification
Pedro Galeano, E. Joseph & Rosa E. Lillo

1.05 Functional principal fitted components regression using B-Spline expansion
AhYeon Park & Serge Guillas

Room 2 **Contributed Session: Inference with censored data**
“Cierzo” **Session chair: Hongyuan Cao**

1.06 Parametrically guided nonparametric density and hazard estimation with censored data
Majda Talamakrouni, Ingrid Van Keilegom & Anouar El Ghouch

1.07 The jackknife estimate of covariance under censorship when covariables are present
Leyla Azarang, Jacobo de Uña Álvarez & Winfried Stute

1.08 Kaplan-Meier estimator based on ranked set samples
Ewa Strzalkowska-Kominiak & M. Mahdizadeh

Room 3 **Contributed Session: Bootstrap for dependent data**
“Gregal” **Session chair: Anne Leucht**

1.09 Generalized seasonal block Bootstrap method for time series with periodic structure
Anna Dudek

1.10 The autoregressive-aided block bootstrap
Tobias Niebuhr, Jens-Peter Kreiss & Efsthios Paparoditis

1.11 Bootstrapping realized covariance
Gang Feng & Jens-Peter Kreiss

1.12 Bootstrap for nonparametric trend estimation in locally stationary time series
Jonas Krampe, Efsthios Paparoditis & Jens-Peter Kreiss

- 10:00 - 11:00** **Contributed Session: Nonparametric inference in statistical models I**
Room 4
“Cantabria”
Session chair: Mary Meyer
- 1.13 A boosting algorithm for estimating generalized propensity scores with continuous treatments
Yeying Zhu, Donna L. Coffman & Debashis Ghosh
- 1.14 Nonparametric estimation of a conditional distribution for inter-occurrence times through waiting times in a cross-sectional sampling
José Tomás Alcalá & Jose A. Cristóbal
- 1.15 Nonparametric method for estimating the distribution of time to failure of engineering materials
Salvador Naya, L. López-de-Ullibarri, J. Tarrío-Saavedra & A. Meneses
- Room 5**
“Asturias”
Contributed Session: Classification models in practice and stochastic order models
Session chair: Beatriz Pateiro
- 1.16 Moving order statistics
Fernando López-Blázquez & Salamanca Miño
- 1.17 Classification based on non-negative matrix factorization
Hong Gu, Toby Kenney & Yun Cai
-
- 11:00 - 11:30** **Coffee break**
-
- 11:30 - 12:30** **Plenary Lecture II: Peter Bühlmann- ETH Zurich**
Room
“Doñana”
- 1.18 Inhomogeneous large-scale data: maximin effects and their statistical estimation
- 12:30 - 13:30** **Special Invited Session II: Irène Gijbels - KU Leuven**
Room
“Doñana”
- 1.19 Nonparametric estimation of conditional distribution functions via preadjustment techniques and extensions
- Room 1**
“Levante”
Contributed Session: Functional data models
Session chair: Piercesare Secchi
- 1.20 Efficiency in functional nonparametric models with autoregressive errors
Camille Ternynck, Sophie Dabo-Niang & Serge Guillas
- 1.21 Estimation in flexible functional models using continuous wavelet dictionaries
Madison Giacomci, Gerda Claeskens, Irene Gijbels & Maarten Jansen
- 1.22 On the optimal allocation of components in parallel series and series parallel system
Henry Laniado & Jiantian Wang

- 12:30 - 13:30**
- Room 2**
“Cierzo”
- Contributed Session: Quantile regression models**
Session chair: Davy Paindaveine
- 1.24 A lack-of-fit test of quantile regression models with multiple covariates
Mercedes Conde-Amboage, César Sánchez-Sellero & Wenceslao González-Manteiga
 - 1.25 A bandwidth selector for nonparametric quantile regression
César Sánchez-Sellero & Mercedes Conde-Amboage
 - 1.26 Model selection via Bayesian information criterion for quantile regression models
Eun Ryung Lee, H. Noh & Byeong Uk Park
 - 1.27 Nonparametric estimators of extreme value index based on averaged regression quantiles
Jan Picek
- Room 3**
“Gregal”
- Contributed Session: Testing model dependence**
Session chair: Maria Rizzo
- 1.29 Consistent and powerful nonparametric tests for dependence
Andrey Feuerverger
 - 1.30 Conditional empirical copula process for time series
Félix Camirand, Jean-François Quessy & Taoufik Bouezmarni
- Room 4**
“Cantabria”
- Contributed Session: Robust statistics**
Session chair: Mia Hubert
- 1.31 A von Mises approach for the small sample distribution of the trimmed mean
Alfonso García-Pérez
 - 1.32 Sparse robust graphical models
Hyonho Chun
 - 1.33 (Robust) multivariate mode estimation
Steffen Liebscher, Tomas Kirschstein, Giovanni G. Porzio & Giancarlo Ragozini
 - 1.34 Nonparametric robust regression estimates
Oleg Cherepanov & V. A. Simakhin
- Room 5**
“Asturias”
- Contributed Session: Tail inference and related problems**
Session chair: Emmanuel Flachaire
- 1.35 Subsampling method for periodically stationary sequences with heavy tails and long memory
Elzbieta Gajeczka-Mirek & Jacek Leskow
 - 1.36 A directional multivariate Value at Risk
Raúl Torres, Henry Laniado & Rosa E. Lillo
 - 1.37 Lower bounds to the accuracy of tail index estimation
Sergey Novak

| 13:30 - 15:00 | Lunch |
|--|--|
| 15:00 - 17:00 <i>Room 1</i> <i>“Levante”</i> | <p>Invited Session: Resampling methods for complex data structures Organizer & Chair: Dimitris Politis</p> <p>1.38 High-dimensional autocovariance matrices, linear process bootstrap and optimal linear prediction <i>Dimitris Politis</i></p> <p>1.39 Bootstrapping sample quantiles of discrete data <i>Carsten Jentsch, Anne Leucht & Tobias Niebuhr</i></p> <p>1.40 Approximating moments by nonlinear transformations, with an application to resampling from fat-tailed distributions <i>Karim M. Abadir & Adriana Cornea</i></p> <p>1.41 Sequential subsampling and applications <i>Ansgar Steland</i></p> |
| <i>Room 2</i> <i>“Cierzo”</i> | <p>Invited Session: Nonparametric functional estimation for specific data Organizer & Chair: Dimitris Ioannides</p> <p>1.42 Regularization procedure of signal estimation for multiplicative models <i>Alexander Dobrovidov & L. Markovich</i></p> <p>1.43 Kalman filtering algorithms using nonparametric functional estimators <i>Koshkin Gennady & Valery Smagin</i></p> <p>1.44 Estimating a distribution function for censored and dependent data <i>Dimitris Ioannides</i></p> <p>1.45 Measures of asymmetry based on a necessary/necessary and sufficient conditions for symmetry <i>Dimitrios Bagkavos, Popat N. Patil & A.T.A Wood</i></p> |
| <i>Room 3</i> <i>“Gragal”</i> | <p>Invited Session: Statistical inference for network models Organizer: Liza Levina Session Chair: Sharmodeep Bhattacharya</p> <p>1.46 Scalable machine learning on massive social networks <i>Eric Xing</i></p> <p>1.47 Pseudo-likelihood methods for community detection in large sparse networks <i>Arash Amini, Aiyu Chen, Peter J. Bickel & Elizaveta Levina</i></p> <p>1.48 Universality of the stochastic blockmodel <i>Sofia Olhede & Patrick J. Wolfe</i></p> <p>1.49 Estimating latent variable densities for exchangeable network models <i>Sharmodeep Bhattacharya, Peter J. Bickel & Patrick J. Wolfe</i></p> |

15:00 - 17:00 Invited Session: Non- and semi-parametric methods for random networks

Room 4
“Cantabria”

Organizer: Yulia Gel

Session Chair: Milan Stehlik

- 1.50 Dynamic of communities in social networks
Emmanuel Viennet
- 1.51 Nonparametrics for network degree structure
Sofia C. Ohlede & Patrick J. Wolfe
- 1.52 Patchwork bootstrap for inference on random networks
Yulia R. Gel, Vysacheslav Lyubchich & Lilia Leticia Ramírez Ramírez
- 1.53 A non-parametric approach to random graph models with local dependence
Michael Schweinberger & Mark S. Handcock

Room 5
“Asturias”

Invited Session: New advances in nonparametric function estimation

Organizer: Aurore Delaigle

Session Chair: Ursula Müller

- 1.54 Identifying skeleton curves in noisy data: a Bayesian approach to principal curves
Hanna Jankowski & Larissa Stanberry
- 1.55 Recent progress in nonparametric curve estimation with group testing data
Aurore Delaigle
- 1.56 Nonparametric optimal tests for structure detection in multivariate data
Gerda Claeskens, Jean Marc Freyermuth, F.Austin & Christophe Pouet
- 1.57 Multivariate plug-in bandwidth selection for density and density derivative estimation
José Enrique Chacón, Tam Duong & Matthew P. Wand

Room 6
“Castilla”

Invited Session: Nonlinear dependence

Organizer & Chair: Dag B. Tjoestheim

- 1.58 Partial distance covariance
Maria L. Rizzo & Gábor J. Székely
- 1.59 A fourier analysis of extremal events
Yuwei Zhao & Thomas Mikosch
- 1.60 Multivariate density estimation by local Gaussian approximations
Håkon Otneim
- 1.61 Measuring dependence with local Gaussian correlation
Dag Bjarne Tjoestheim

17:00 - 17:30 Coffee break

17:30 - 19:30

**Room 1
"Levante"****Invited Session: Nonparametrics for complex data****Organizer & Chair: Soumendra Lahiri**

- 1.62 A difference based approach to the semiparametric partial linear multivariate model
Michael Levine, Lawrence D. Brown & Lie Wang
- 1.63 A Conditional empirical likelihood approach to combine sampling design and population level information
Sanjay Chaudhuri, Mark Handcock & Michael Rendall
- 1.64 Resampling assessment of the scale of geophysical and environmental process models
Dan Nordman & Mark S. Kaiser
- 1.65 On statistical testing for spatio-temporal stationary random fields
Yoshi Yajima & Yasumasa Matsuda

**Room 2
"Cierzo"****Invited Session: Functional data analysis****Organizer & Chair: Juan A. Cuesta-Albertos**

- 1.66 Detecting outlying behavior of curves
Mia Hubert
- 1.67 Extending DD-classifier on the functional setting
Manuel Febrero-Bande, Juan A. Cuesta-Albertos & Manuel Oviedo de la Fuente
- 1.68 A penalized PLS approach in functional regression with ordinal response
Manuel Escabias, Ana M. Aguilera & Carmen Aguilera-Morillo
- 1.69 Multiple-output functional quantile regression
Davy Paindaveine & Germain Van Bever

**Room 3
"Gregal"****Invited Session: Signal processing****Organizer: Anirban DasGupta****Session Chair: Marianna Pensky**

- 1.70 Adaptive one-bit matrix completion
Eric Moulines, Olga Klopp, J. Lafon & Joseph Salmon
- 1.71 Solution of linear inverse problems using flexible dictionaries
Marianna Pensky
- 1.72 Diagnostics of mammograms by wavelet based scaling tools
Pepa Ramírez-Cobo & Brani Vidakovic
- 1.73 Learning with localized support vector machines
Ingo Steinwart & Mona Eberts

Room 4 **Invited Session: Copula, quantile, and CDF estimation**
“Cantabria” **Organizer & Chair: Jeffrey Racine**

- 1.74 Regression estimation based on Bernstein density copulas
Taufik Bouezmarni, Benedikt Funk & Félix Camirand Lemyre
- 1.75 Quantiles and inequality indices estimation from heavy-tailed distribution
Emmanuel Flachaire & Arthur Charpentier
- 1.76 Root-T consistent density estimation in GARCH models
Jeroen Rombouts
- 1.77 Cross-validated mixed datatype bandwidth selection for nonparametric cumulative distribution/survivor functions
Jeffrey Racine & Hongjun Li

Room 5 **Invited Session: Conditional inference and empirical processes with applications**
“Asturias” **in Survival Analysis**
Organizer & Chair: John O’Quigley

- 1.78 Semiparametric approach for regression with covariate subject to limit of detection
Bin Nan & Shengchun Kong
- 1.79 Bias correction in semiparametric models
Anthony Gamst
- 1.80 Analysis of proportional hazards model with sparse longitudinal covaraites
Hongyuan Cao, Matthew M. Churpek, Donglin Zeng & Jason P. Fine

Room 6 **Invited Session: Data analysis on stratified spaces**
“Castilla” **Organizer & Chair: Vic Patrangenaru**

- 4.16 Circular scale spaces and early stem cell diversification
Stephan Huckeman, Max Sommerfeld & Axel Munk
- 4.17 Statistical analysis of projective shapes of curves
Robert Paige, Vic Patrangenaru, & Mingfei Qiu
- 4.18 Beyond means: a global view of the Frechet function
Washington Mio & Facundo Mémoli
- 4.19 Cartan means and Cartan anti-means on stratified spaces
Vic Patrangenaru, Harrie Hendriks & Mingfei Qiu

Friday, June 13th, 2014

08:00 - 09:00 **Advisory & Charting committees meeting**
Room 1
Levante

09:00 - 11:00
Room 1
"Levante"

Invited Session: Dimension reduction and variable selection

Organizer: Michael Akritas

Session Chair: Michael Akritas & Haiyan Wang

- 2.01 The projection pursuit multiple index model
Michael Akritas
- 2.02 On the performance of the Lasso as a method of nonparametric estimation
Arnak Dalalyan, Mohamed Hebiri & Johannes Lederer
- 2.03 Robust rank correlation based screening
Heng Peng, Gaorong Li, Jun Zhang, & Lixing Zhu
- 2.04 An improved quantitative structure-activity relationship (QSAR) analysis of peptides
Haiyan Wang, Zhijun Dai, Lifeng Wang, Yuan Chen, Lianyang Bai & Zheming Yuan

Room 3
"Gregal"

Invited Session: Distributional inference

Organizer: Regina Liu

Session Chair: Juan Cuesta Albertos

- 2.05 Distributional inference: reproducibility and limitations
Donald A. S. Fraser
- 2.06 A general predictive distribution function and confidence distributions
Min-ge Xie
- 2.07 Multivariate meta-analysis of heterogeneous studies using only summary statistics: efficiency and robustness
Regina Liu, Dungang Liu & Min-ge Xie
- TBA
Nancy Reid

Room 4
"Cantabria"

Invited Session: Nonparametric econometrics

Organizer & Chair: Miguel Delgado

- 2.08 Testing for breaks in regression models with dependent data
Javier Hidalgo & Violetta Dalla
- 2.09 Nonparametric estimation of fixed effects panel data varying coefficient models
Juan Rodríguez Poo & Alexandra Soberón
- 2.10 Distribution-free tests of inequality constraints on conditional moments
Juan C. Escanciano & Miguel A. Delgado
- 2.11 Small-b and fixed-b asymptotics for weighted covariance estimation in fractional cointegration
Javier Hualde & Fabrizio Iacone

Room 5
"Asturias"

Invited Session: Statistics for random fields

Organizer & Chair: Jens-Peter Kreiss

- 2.12 Max-stable processes on river networks
Sebastian Engelke, Peiman Asadi & Anthony C. Davis

- 09:00 - 11:00 2.13 Prediction and estimation of random fields on quarter plane
Priya Kohli & Mohsen Pourahmadi
- 2.14 Baxter's inequality and sieve bootstrap for random fields
Marco Meyer, Carsten Jentsch & Jens-Peter Kreiss
- 2.15 A test for spatial stationarity of irregular spaced spatial data
Suhasini Subbarao

Room 6
"Castilla"

Invited Session: Functional data analysis

Organizer & Chair: Alois Kneip

- 2.16 Principal components without eigenanalysis
James Ramsay
- 2.17 Points impact in functional linear regression
Pascal Sarda, Alois Kneip & Dominik Poss
- 2.18 Modeling electricity spot prices as functional data on random domains
Dominik Liebl & Alois Kneip
- 2.19 Registration and functional principal components
Alois Kneip & Heiko Wagner

Room 7
"León"

Invited Session: Session in honor of Prof. L. Cavalier

Organizer & Chair: Eric Matzner-Lober

- Linear and conic programming approaches to high-dimensional errors-in-variables models
Alexandre Tsybakov
- 2.20 Risk hull method in linear ill-posed inverse problems
Yuri Golubev
- TBA
Nicolas Hengartner

11:00 - 11:30 **Coffee break**

11:30 - 13:30 **Invited Session: Uncertainty quantification and emulators**

Room 1
"Levante"

Organizer & Chair: Philip B. Stark

- 2.21 Bound-to-bound data collaboration
Michael Frenklach & Andrew Packard
- 2.22 What do I make of your latinorum? Sensitivity auditing of mathematical modelling
Andrea Saltelli & Silvio Funtowicz
- 2.23 Bayesian model calibration in the presence of model discrepancy
Ralph Smith & Jerry McMahan, Jr.
- 2.24 Mini-minimax uncertainty quantification for emulators
Philip B. Stark and Jeffrey C. Regier

11:30 - 13:30
Room 3
 “Gragal”

Invited Session: Advances in functional data analysis
Organizer & Chair: Juan Romo

- 2.25 Fast DD-classification of functional data
Karl Mosler & Pavlo Mozharovskyi
- 2.26 Geostatistics for Hilbert data
Piercesare Secchi
- 2.27 Visualization of shape outliers in functional data samples
Ana Arribas & Juan Romo
- 2.28 An alternative to FPCA for functional data in two arguments
Pedro Delicado, Kehui Chen & Hans-Georg Müller

Room 4
 “Cantabria”

Invited Session: Statistical inference for finite samples
Organizer & Chair: Valentin Patilea

- 2.29 Saddle-point model selection
Krill Efimov & Vladimir Spokoiny
- 2.30 Conditional moment restrictions estimation: finite sample theory
Valentin Patilea, Vladimir Spokoiny & Nikita Zhivotovskiy
- 2.31 Critical dimension in parametric and semiparametric Bernstein - von Mises Theorem
Maxim Panov & Vladimir Spokoiny
- 2.32 Functional linear instrumental regression
Jan Johannes

Room 5
 “Asturias”

Invited Session: Robust estimators in additive models with missing responses
Organizer & Chair: Graciela Boente

- 2.33 Universal asymptotics for high-dimensional sign tests
Davy Paindaveine & Thomas Verdebout
- 2.34 A depth notion for random networks and some nonparametric results
Ricardo Fraiman & Daniel Fraiman
- 2.35 Some recent results on kernel methods for independent or for dependent data with special emphasis on additive models
Andreas Christmann & Ding-Xuan Zhou
- 2.36 Robust estimators in additive models with missing responses
Graciela Boente, Alejandra Martínez & Matias Salibian-Barrera

Room 6
 “Castilla”

Invited Session: Statistical problems in network analysis
Organizer & Chair: George Michailidis

- 2.37 Change-point inference for time- varying Erdos-Renyi graphs
Mouli Banerjee, Elena Yudovina & George Michailidis
- 2.38 Graph estimation with joint additive models
Ali Shojaie, Arend Voorman & Daniela Witten

- 11:30 - 13:30 2.39 Multiview and dynamic network analysis with matrix factorization
Shawn Mankad & George Michailidis
- 2.40 Estimation in high-dimensional vector autoregressive models
George Michailidis

Room 7
“León”

Invited Session: Inference in the large-p, small-n paradigm
Organizer & Chair: Jeff Hart

- 2.41 Quadratic-type classification for non-gaussian, high-dimensional data
Makoto Aoshima & Kazuyoshi Yata
- 2.42 Two-sample thresholding tests for high dimensional means
Song Xi Chen, Jun Li & Ping-Shou Zhong
- 2.43 Testing equality of a large number of densities
Jeff Hart & D. Zhan
- 2.44 LP nonparametric network modeling
Subhadeep Mukhopadhyay & Emanuel Parzen

13:30 - 15:00 **Lunch**

15:00 - 17:00 **Invited Session: Recent Advances in Nonparametrics**
Organizer & Chair: Moulinath Banerjee

Room 1
“Levante”

- 2.45 Convex function estimation
Dragi Anevski
- 2.46 Semiparametric Bernstein-von Mises theorem: second order studies
Guang Cheng, Yun Yang & David Dunson
- 2.47 Confidence bands for distribution functions: A new look at the law of the iterated logarithm
Lutz Duembgen & Jon A. Wellner
- 2.48 Two-stage plans for estimating the inverse of a monotone function
George Michailidis

Room 3
“Gredal”

Invited Session: Nonparametric inference In ROC curves
Organizer & Chair: Wenceslao González

- 2.49 Nonparametric estimation of the ROC curve based on smoothed empirical distribution functions
Alicja Jokiel-Rokita & Michal Pulit
- 2.50 Nonparametric inference for covariate-specific summary indices of ROC curves
Juan Carlos Pardo Fernández, Elisa M. Molanes-López & Emilio Letón
- 2.51 Functional partial area under the curve regression: a metabolic syndrome case study
Vanda Inácio, Miguel de Carvalho, Todd A. Alonzo & Wenceslao González-Manteiga

- 15:00 - 17:00 2.52 Bayesian nonparametric Youden index modeling
Miguel de Carvalho, Vanda Inácio de Carvalho & Adam Branscum

Room 4 **Invited Session: Spatial and high dimensional statistics**

“Cantabria” **Organizer: Anirban DasGupta**

Session Chair: Yaacov Ritov

- 2.53 Some tools for the assessment of contamination models in general dimension
Eustasio del Barrio
- 2.54 Limit theorems for strictly stationary random fields satisfying strong mixing conditions
Cristina Tone
- 2.55 Can honest Bayes methods apply to complex models?
Yaacov Ritov, Peter J. Bickel, Anthony Gamst & Bas Kleijn
- 2.56 Non-parametric cross-covariance functions for multivariate spatial data
Hao Zhang & Y. Wang

Room 5 **Invited Session: Non- and semi-parametric inference for locally stationary processes**

“Asturias” **Organizer & Chair: Holger Dette**

- 2.57 Asymptotic efficiency of tests and asymptotic equivalence of locally stationary Gaussian processes
Inder Tecuapetla
- 2.58 On the estimation of long-memory locally stationary processes
Wilfredo Palma
- 2.59 Constructing adaptive interference-reduced Wigner-Ville spectral estimators of non-stationary time series
Jean-Marc Freyermuth
- 2.60 Simultaneous quantile inference for locally stationary long memory time series
Zhou Zhou

Room 6 **Invited Session: Advanced techniques applied to electrical energy management**

“Castilla” **Organizer & Chair: Camila P. E. de Souza**

- 2.61 Analysis of aggregated curves from mixed populations applied to transformer electricity load data
Ronaldo Dias, Amanda Lenzi, Camila P.E. de Souza, Nancy E. Heckman & Nancy García
- 2.62 Switching nonparametric regression models with an application to building power usage data
Camila P. E. de Souza & Nancy E. Heckman
- 2.63 Modeling and forecasting daily electricity loads via functional clustering and curve linear regression
Haeran Cho, Yannig Goude, Xavier Brossat & Qwei Yao

- 2.64 Creating and using low voltage network templates to identify network stresses
Gavin Shaddick
- Room 7**
“León”
- Invited Session: Nonparametric estimation of extremes in time series and random fields**
Organizer: Natalia Markovich
Session Chair: John Einmahl
- 2.65 Data-dependent smoothing of nonparametric estimates by discrepancy method
Natalia Markovich
- 2.66 A new class of the tail index estimators and the improvement of the Hill estimator
Vygantas Paulauskas
- 2.67 Prediction of stable random fields and time series
Elena Shmileva
- 2.68 On favorable extremes modeling
Milan Stehlik
-
- 17:00 - 17:30** **Coffee break**
-
- 17:30 - 19:30** **Invited Session: Nonparametric estimation in regression models**
Room 1 **Organizer & Chair: Gerda Claeskens**
“Levante”
- 2.69 Nonparametric regression with one-sided irregular errors
Natalie Neumeyer, Holger Drees & Leonie Selk
- 2.70 Variable and shape selection for the generalized additive model
Mary Meyer
- 2.71 A unified framework for spline estimators
Tatyana Krivobokova & Katja Schwarz
- 2.72 Nonparametric estimation and forecasting of edge probabilities in a time variable random graph model
Melanie Birke
- Room 3**
“Gregal”
- Invited Session: Geometric methods in statistics**
Organizer & Chair: TBA
- 2.73 Quantifying and reducing uncertainties on excursion sets under a gaussian random field prior
David Ginsbourger, Clément Chevalier, Julien Bect, Dario Azzimonti & Ilya Molchanov
- 2.74 On the comparison of the shape variability
Miguel López-Díaz
- 2.76 Comparing population clusterings
José Enrique Chacón

Room 4
“Cantabria”**Invited Session: Survival analysis**
Organizer & Chair: Jacobo de Uña-Álvarez

- 2.77 Estimation of varying coefficient models with randomly censored data
Ingrid Van Keilegom, Seon J. Yang, Anouar El Ghouch & Cedric Heuchenne
- 2.78 Characterizing the association between disease onset and survival under cross-sectional sampling
Marco Carone, Luca Pozzi, Mark van der Laan, Daniel Scharfstein & Masoud Asgharian
- 2.79 Generalized copula-graphic estimation with left-truncated and right-censored data
Jacobo de Uña-Álvarez & Noël Veraverbeke
- 2.80 A covariate adjusted Mann-Whitney test for comparing two sojourn times under right censoring
Somnath Datta

Room 5
“Asturias”**Invited Session: Sequential Nonparametrics**
Organizer & Chair: Marie Huskova

- 2.81 Robust testing of CAPM portfolio betas
Zuzana Praskova, Marie Hušková, Josef Steinebach & Ondrej Chochola
- 2.82 Tests for structural changes in time series of counts
Simos Meintanis, Šárka Hudecová & Marie Hušková
- 2.83 Dependent wild bootstrap for the empirical process
Anne Leucht, Paul Doukhan, Gabriel Lang & Michael H. Neumann
- 2.84 Change-point tests for martingale difference hypothesis
Marie Huskova, Zdenek Hlávka, Claudia Kirch & Simos Meintanis

Room 6
“Castilla”**Invited Session: Variable selection and response prediction in high dimensional data**
Organizer & Chair: Haiyan Wang

- 2.85 Semi-and non-parametric methods for genomics big data
Jun Xie
- 2.86 Estimating false inclusion rates in penalized regression models
Patrick Breheny
- 2.87 High dimensional ODEs coupled with mixed-effects modeling techniques for gene regulatory network identification
Hua Liang
- 2.88 A flexible semiparametric forecasting model for time series
Degui Li, Oliver Linton & Zudi Lu
- 2.89 Semiparametric GEE analysis in partially linear single-index models for longitudinal data
Jia Chen, Degui Li, Hua Liang & Suojin Wang

Room 7
“León”

Invited Session: Statistical inference for deformation models

Organizer & Chair: Axel Munk

- 2.90 Separation of amplitude and phase variation in point processes
Victor Panaretos
- 2.91 A deformation model for empirical distributions with Wasserstein’s distance
Jean- Michel Loubes
- 2.92 Convergence of the Wasserstein distance of empirical Gaussian distributions
Thomas Rippl, A. Munk & A. Sturm
- 2.93 Confidence sets based on thresholding estimators in high-dimensional Gaussian regression
Ulrike Schneider

Sunday, June 15th, 2014

9:00 - 10:00 Plenary Lecture III: Steve Marron – University of North Carolina

Room
“Doñana”

- 3.01 OODA, Visualization, Backwards PCA & HDLSS Asymptotics

10:00 - 11:00 Special Invited Session III: Montserrat Fuentes – North Carolina State University

Room
“Doñana”

- 3.02 Nonstationary and nonparametric modelling of multivariate correlated data via kernel processes mixing

Room 1
“Levante”

Contributed Session: Rank tests

Session chair: Michael G. Schimek

- 3.03 A semiparametric framework for rank tests
Jan de Neve, Olivier Thas & Jean-Pierre Ottoy
- 3.04. Diagnostic tests for the location-shift assumption
Olivier Thas & John C.W. Rayner
- 3.05 On robust multivariate Kaplan-Meier estimator
Purba Mondal, Anannya Nath & Subhra Sankar Dhar

Room 2
“Cierzo”

Contributed Session: Bandwidth and kernel selection

Session chair: Pedro Delicado

- 3.07 Kernel selection in nonparametric density estimation
María Isabel Borrajo, Jose E. Chacón & Alberto Rodríguez-Casal
- 3.08 Nonparametric kernel density estimation for grouped data
Miguel Ángel Reyes, Mario Francisco-Fernández & Ricardo Cao

10:00 - 11:00
Room 3
“Gregal”

Contributed Session: Multiple testing
Session chair: Anne Ruiz-Gazen

- 3.09 Multiple adaptive tests and the false discovery rate control (FDR) under dependent p-values
Arnold Janssen & Philipp Heesen
- 3.10 Family-wise separation rates for multiple testing
Magalie Fromont, Matthieu Lerasle, & Patricia Reynaud-Bouret
- 3.11 Data Integration in early drug development with nonparametric FDR control for feature extraction
Federico Mattiello, Olivier Thas & Bie Verbist

Room 4
“Cantabria”

Contributed Session: Data depth with applications
Session chair: Subhra Sankar Dhar

- 3.12 Robust multivariate regression using data depth with applications to high-dimensional sparse data
Subhajit Dutta & Marc G. Genton
- 3.13 Consistency of infimal depth for functional data
Stanislav Nagy
- 3.14 A comparative study of statistical functional depths
Alicia Nieto-Reyes
- 3.15 Expectile trimming
Ignacio Cascos

Room 5
“Asturias”

Contributed Session: Measurement error and variable selection
Session chair: Stefan Fremdt

- 3.16 Kernel density estimation with Berkson error
James Long, Nouredine El Karoui & John Rice
- 3.17 Robust nonnegative garrote variable selection in linear regression
Inge Vrinssen & Irène Gijbels
- 3.18 Nonparametric lack-of-fit testing and consistent variable selection
Adriano Z. Zambom & Michael G. Akritas
- 3.19 On consistency of the least squares estimators in linear errors-in-variables models with infinite variance errors
Yuliya Martsynuk

Room 6
“Castilla”

Contributed Session: Semiparametric models and nonparametric bayesian models
Session chair: Hanna Jankowski

- 3.20 Semiparametric M-estimation with missing covariates
Francesco Bravo
- 3.21 Bayesian nonparametric estimation of finite population quantities in absence of design information on nonsampled units
Sahar Z. Zangeneh, Robert W. Keener & Roderick J.A. Little

- 3.22 Particle learning for Bayesian nonparametric stochastic volatility model
Concepción Ausín, Audrone Virbickaite, Hedibert Freitas Lopes & Pedro Galeano

11:00 - 11:30 Coffee break

11:30 - 12:30 Plenary Lecture IV: Marc Hallin - Université Libre de Bruxelles

- Room* 3.23 Laplace-Monge-Kantorovitch depth
“Doñana”

12:30 - 13:30 Special Invited Session IV: Robert Serfling- University of Texas at Dallas

- Room* 3.24 Depth functions in multivariate and other data settings: Concepts, perspectives,
“Doñana” tools, applications

12:30 - 13:30 Contributed Session: Goodness-of-fit for regression models

Room 1 **Session chair: Lutz Duembgen**
“Levante”

- 3.25 A goodness-of-fit test for parametric models with directional predictors
Eduardo García-Portugués, Ingrid Van Keilegom, Rosa M. Crujeiras & Wenceslao González-Manteiga
- 3.26 New goodness-of-fit diagnostics for conditional discrete response models
Igor Kheifets & Carlos Velasco
- 3.27 Goodness-of-fit tests in semiparametric transformation models
Benjamin Colling & Ingrid Van Keilegom

Room 2 **Contributed Session: Topics in regression**
“Cierzo”

Session chair: Ursula Müller

- 3.28 Quantile estimation in varying coefficient models and non-crossingness of conditional quantile curves
Yudhie Andriyana, Irène Gijbels & Anneleen Verhasselt
- 3.29 Testing for constancy in varying coefficient models
Mohamed Ahkim & Anneleen Verhasselt
- 3.30 Precautionary savings over the life cycle: a simple two step locally constant least squares estimator
Alexandra Soberón & Juan M. Rodríguez-Poo
- 3.31 Model-based clustering for high-dimensional regression data
Emilie Devijver

Room 3 **Contributed Session: Set estimation and related methods**
“Gregar”

Session chair: Ignacio Cascos

- 3.32 A new data-driven method for estimating the support
Paula Saavedra-Nieves & Alberto Rodríguez-Casal

- 12:30 - 13:30 3.33 Algorithms to estimate the β -medial axis
Beatriz Pateiro-López, Antonio Cuevas & Pamela Llop
- 3.34 Adaptive estimation of convex polytopes and convex bodies
Victor-Emmanuel Brunel
- Room 4**
“Cantabria”
- Contributed Session: Nonparametric inference in statistical models II**
Session chair: Anestis Antoniadis
- 3.35 Regularization techniques in recovering structural breaks in nonparametric regression
Matús Maciak, & Ivan Mizera
- 3.36 Claim reserving using distance-based generalized linear models
Eva Boj del Val & Teresa Costa
- 3.37 Change-point for regression derivative with non-stationary errors
Samir Ben Hariz Samir & Mehdi Zorgui
- 3.38 Selection of the smoothing parameter for sparse regularization of linear inverse problems
Caroline Giacobino & Sylvain Sardy
- Room 5**
“Asturias”
- Contributed Session: Inverse problems**
Session chair: Karl Mosler
- 3.39 A statistical solution to the illumination inverse problem from a single image
Myriam Vimond, Nicolas Klutchnikoff & S. Geaffray
- 3.40 Nonparametric and semiparametric inference for signal/image symmetries
Miroslaw Pawlak
- Room 6**
“Castilla”
- Contributed Session: Varying coefficient models**
Session chair: Candida Geerdens
- 3.41 Nonparametric estimation in interval censored data using the Bezier curve
Choongrak Kim & Whasoo Bae
- 3.42 In sample forecasting with local linear survival densities
Munir Hiabu, Enno Mammen, M^a Dolores Martínez Miranda & Jens Perch Nielsen
- 3.43 Nonparametric estimation of a distribution function from doubly truncated data under dependence
Carla Moreira, Jacobo de Uña-Álvarez & Roel Braekers

13:30 - 15:00 **Lunch**

15:00 - 17:00 Invited Session: Statistical inference in cure models

Room 1
“Levante”

Organizer & Chair: Ricardo Cao

- 3.44 A general approach for cure models in survival analysis
Valentin Patilea & Ingrid Van Keilegom
- 3.45 Prediction and variable selection in AFT cure models with interval censored data
Anouar El Ghouch, Sylvie Scolas & Catherine Legrand
- 3.46 Recent advances in nonparametric methods for mixture cure models
Yingwei Peng
- 3.46 Partially linear transformation cure models for interval-censored data
Liming Xiang & T. Hu

Room 2
“Cierzo”

Invited Session: Financial econometrics

Organizer & Chair: Karim Abadir

- 3.48 Nonstationary cross-validation with applications to predictive regression
Valentina Corradi
- 3.49 Robust econometric inference for stock return predictability
Alexandros Kostakis, Tassos Magdalinos & Michalis Stamatogiannis
- 3.50 Unbiased QML estimation of log-GARCH models in the presence of zero returns
Genaro Sucarrat & Álvaro Escribano
- 3.51 A unified theory for time varying models: foundations with applications in the presence of breaks and heteroscedasticity
Menelaos Karanasos, Alexandros G. Paraskevopoulos & Stavros Dafnos

Room 3
“Gregal”

Invited Session: Inference and variable selection in flexible regression models

Organizer & Chair: Irene Gijbels

- 3.52 Variable selection in high-dimensional exponential dispersion models
Anestis Antoniadis, Irene Gijbels, Sophie Lambert-Lacroix & Jean-Michel Poggi
- 3.53 Testing additivity in nonparametric regression
Eric Matzner-Lober
- 3.54 Confidence interval for a function-valued predictor for non stationary processes
Jean-Michel Poggi, Anestis Antoniadis, Xavier Brossat & Jairo Cugliari
- 3.55 Nonparametric point source estimation in Cosmology with block total variation and block lasso
Sylvain Sardy

Room 4
“Cantabria”

Invited Session: Structured nonparametric models

Organizer: Enno Mammen

Session Chair: Byeong Park

- 3.56 Singular additive models for function to function regression
Byeong Park, Hans-Georg Müller & Wenwen Tao

- 15:00 - 17:00 3.57 Detecting smooth changes in locally stationary processes
Holger Dette & Michael Vogt
- 3.58 Optimal estimation of components in structured nonparametric models
Martin Wahl
- 3.59 A new nonparametric stationarity test of time series in time domain
Suojin Wang, Lei Jin & Haiyan Wang

Room 5
“Asturias”

Invited Session: Functional time series

Organizer & Chair: Stathis Paparoditis

- 3.60 Short-term load forecasting: the similar shape functional time series predictor
Theofanis Sapatinas & Efsthios Paparoditis
- 3.61 Functional lagged regression
Siegfried Hörmann, Łukasz Kidzinski & Piotr Kokoszka
- 3.62 Variable selection and dimension reduction criteria in functional regression models
Stefan Fremdt
- 3.63 Bootstrap Based Testing for Functional Data
Stathis Paparoditis & Theofanis Sapatinas

Room 6
“Castilla”

Invited Session: Nonparametric approaches for high-dimensional data

Organizer & Chair: Annie Qu

- 3.64 Sparse and functional principal components analysis
Genevera Allen
- 3.65 On estimation efficiency of the dimension reduction space
Yanyuan Ma & Liping Zhu

Room 7
“León”

Invited Session: Empirical likelihood: extensions and applications

Organizer & Chair: Nils Lid Hjort

- 4.58 The HEL: a hybrid empirical likelihood bridging from nonparametrics to parametrics
Nils Lid Hjort
- 4.59 Testing for uniform stochastic ordering via empirical likelihood
Ian McKeague & Hammou El Barmi
- 4.60 Empirical likelihood in high dimension and confidence sets for functional parameters
Soumendra Lahiri & Saswata Sahoo
- 4.61 A consistent jackknife empirical likelihood test for distribution functions
Qihua Wang & Xiaohui Liu

17:00 - 17:30 **Coffee break**

17:30 - 19:30
Room 1
“Levante”

Invited Session: Cure models in survival analysis

Organizer & Chair: Ingrid Van Keilegom

- 3.68 Quantile regression with cure rate model
Guosheng Yin & Yuanshan Wu
- 3.69 Bias correction using the SIMEX algorithm in the promotion time cure model with measurement error
Aur lie Bertrand, Raymond J. Carroll, Catherine Legrand & Ingrid Van Keilegom
- 3.70 Dynamic cure models
Alex Tsodikov
- 3.71 Bootstrap inference in the promotion time cure model
Fran ois Portier, Anouar El Ghouch & Ingrid Van Keilegom

17:30 - 19:30
Room 2
“Cierzo”

Invited Session: Statistics of extremes

Organizer: John Einmahl

Session Chair: Natalia Markovich

- 3.72 Extreme value statistics for a stochastic process that is observed at discrete points only
Laurens de Haan, Holger Drees & Kamil Feridun Turkman
- 3.73 The block maxima method revisited applied to PWM estimators
Ana Ferreira & Laurens de Haan
- 3.74 Statistics of heteroscedastic extremes
John Einmahl, Laurens de Haan & Chen Zhou

Room 3
“Gregal”

Invited Session: Computer intensive techniques for complex data

Organizer & Chair: Michele La Rocca & Luigi Salmaso

- 3.75 Conditional inference for territorial comparisons on the perception of odors
Stefano Bonnini
- 3.76 A permutation approach for ranking of multivariate populations
Livio Corain & Luigi Salmaso
- 3.77 Projection, residuals and permutation for comparing factors in complex designs and signals
Olivier Renaud & Sara Kherad-Pajouh
- 3.78 Testing model structure in high dimensional nonparametric regression
Maria Lucia Parrella, F. Giordano & S.N. Lahiri
- 3.79 Novel methods for modelling multiple ranked lists
Michael Schimek, Peter Hall and Vendula Svendova

Room 4
“Cantabria”

Invited Session: Generalized structured density forecasting with applications to insurance

Organizer & Chair: Maria Dolores Mart nez Miranda & Jens Perch Nielsen

- In-sample forecasting with applications to non-life insurance and mesothelioma mortality

Jens Perch Nielsen

- 3.80 Asymptotics for in-sample density forecasting

Young Kyung Lee, Enno Mammen, Jens P. Nielsen & Byeong U. Park

- 3.81 Geometrically designed spline smoothing with applications in copula estimation

Vladimir Kaishev

17:30 - 19:30 Invited Session: Nonparametric forecasting in utilities

**Room 5
"Asturias"**

Organizer & Chair: Eric Matzner-Lober

- 3.82 Nonparametric forecasting of the French load curve

Vicent Lefieux

- 3.83 Statistical models for electricity load forecasting

Yannig Goude

- 3.84 Automatic component selection in additive modelling of electricity load through the use of penalized regression methods

Vincent Thouvenot, Antoniadis Anestis, Xavier Brossat, Yannig Goude & Jean-M. Poggi

- 3.85 PARMA time series for modeling and prediction of energy market data

Anna Dudek

Room 6 Invited Session: Integer-valued time series

"Castilla"

Organizer: Michael Neumann

Session Chair: Konstantinos Fokianos

- 3.86 Ergodicity of observation-driven time series models and consistency of the maximum likelihood estimator

Eric Moulines & Randal Douc

- 3.87 Identifiability conditions on partially observed Markov chains

Randal Douc, François Roueff & T. Sim

- 3.88 Quasi-likelihood for observation driven models

Konstantinos Fokianos

19:30 - 20:30

**Room 1
"Levante"**

Advisory and charting committees meeting

Monday, June 16th, 2014

09:00 - 11:00 Invited Session: Nonparametric FDA

**Room 1
"Levante"**

Organizers: Philippe Vieu, Germán Aneiros & Laurent Desol

Session chair: Laurent Delsol

- 4.01 Functional modelling and forecasting of electricity load

Paula Raña Míguez, Germán Aneiros Pérez & Juan Vilar

- 4.02 Nonparametric functional prediction of the unabsorbed flux continuum in the Lyman-alpha forest of quasar spectra
Mattia Ciollaro, Jessi Cisewski, Peter Freeman, Chris Genovese, Ross O'Connell & Larry Wasserman
- 4.03 Testing for lack of fit in functional regression models
Samuel Maistre & Valentin Patilea
- 4.04 Hyperspectral image segmentation based on functional kernel density estimation
Laurent Delsol & Cecile Louchet

Room 3
“Gregal”

Invited Session: Recent developments in statistical depth
Organizer & Chair: Marc Hallin

- 4.05 Comparison of multivariate distributions using depth-based quantile-quantile plots and related tests
Subhra Sankar Dhar
- 4.06 Elliptical quantiles and their generalizations
Daniel Hlubinka & Miroslav Šiman
- 4.07 Shape depth
Germain van Bever & Davy Paindaveine

Room 4
“Cantabria”

Invited Session: Empirical resampling potluck
Organizer & Chair: Dan Nordman

- 4.08 Nonparametric confidence regions for the central orientation of random rotations
Ulrike Genschel, Bryan Stanfill & Heike Hofmann
- 4.09 Local empirical likelihood for smooth coefficients panel data models
Francesco Bravo
- 4.10 A nonparametric estimator and bootstrap confidence bands for the Kolmogorov canonical measure
Guillermo Basulto-Elias, Miguel Nakamura & Víctor Pérez-Abreu
- 4.11 Frequency domain empirical likelihood based tests of spatial structures
Dan Nordman, Soutir Bandyopadhyay & Matthew Van Hala

Room 5
“Asturias”

Invited Session: (Auto)covariances
Organizer & Chair: Michael Wolf

- 4.12 The generalised autocovariance function
Alessandra Luati & Tommaso Proietti
- 4.14 Consistent estimation of covariance matrix spectrum in large dimensions
Olivier Ledoit & Michael Wolf
- 4.15 Nonlinear shrinkage for portfolio selection: Markowitz meets goldilocks
Michael Wolf & Olivier Ledoit

- 11:30 - 12:30 **Invited Session: Flexible copula modeling**
Room 6
“Castilla”
Organizer & Chair: Paul Janssen
- 4.54 Pair-copula constructions with nonparametric and mixture pair-copulas
Gregor Weiss
- 4.55 Conditional copula models with multiple covariates
Elif Acar
- 4.56 Model selection for copulas for right-censored event times
Candida Geerdens, Gerda Claeskens & Paul Janssen

11:00 - 11:30 **Coffee break**

- Room 1**
“Levante”
Special Invited Session V: Qiwey Yao - London School of Economics
- 4.20 Segmenting multiple time series by contemporaneous linear transformation
- Room 3**
“Gregal”
Invited Session: Spatial and Bayesian approaches in functional data analysis
Organizer: Serge Guillas
Session Chair: Ian McKeague
- 4.21 Statistical modeling of spatial functional data: application to biomedical data
Sophie Dabo-Niang
- 4.22 Estimation of non-negative surfaces over complex domains using bivariate splines
Serge Guillas, Ming-Jun Lai & Jean Gaudart
- 4.23 Bayesian smoothing for functional data
Dennis Cox, Jingjing Yang & Hongxiao Zhu
- 4.24 Bayesian linear regression-related models with functional inputs
Yvo Pokern, Serge Guillas & A. Y. Park
- Room 4**
“Cantabria”
Invited Session: Diagnostics: lack-of-fit and goodness-of-fit testing
Organizer: Hira L. Koul
Session Chair: Tapabrata Maiti
- 4.25 An empirical likelihood approach to goodness-of-fit testing
Anton Schick & Hanxiang Peng
- 4.26 Multidimensional Lack of Fit Tests for Linear Regression Models Using Minimal Weighted Matching
James Neill & Forrest Miller
- 4.27 Residual-based empirical distribution functions and tests
Ursula U. Müller
- 4.28 A variable selection method for spatial additive models with applications
Tapabrata Maiti

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|------------------------------------|---|
| Room 5 “Asturias” | Invited Session: Statistical analysis of glass ceiling effects |
| | Organizer & Chair: Winfried Stute |
| | 4.29 Modelling the probability of crossing the glass ceiling <i>Maria Paz Espinosa</i> |
| | 4.30 On discrimination and binomial processes <i>Eva Ferreira</i> |
| | 4.31 Testing for glass ceiling effects <i>Winfried Stute</i> |
| Room 6 “Castilla” | Invited Session: Semi- and nonparametric methods and their recent applications |
| | Organizer & Chair: Ronghui (Lily) Xu |
| | 4.32 The analysis of biased time-to-event data with a cured portion <i>Ronghui Xu & Walter Faig</i> |
| 11:30 - 12:30 | 4.33 Not necessarily sparse classification: inference based on robust high confidence sets <i>Jelena Bradic</i> |
| | 4.34 Fast goodness-of-fit tests based on the characteristic function <i>Maria Dolores Jiménez-Gamero</i> |
| <hr/> | |
| 13:30 - 15:00 | Lunch |
| 15:00 - 17:00 | Invited Session: Survey sampling in nonparametric statistics and big-data |
| Room 1 “Levante” | Organizer & Chair: Patrice Bertail |
| | 4.35 Tail index estimation based on survey data <i>Emilie Chautru, Patrice Bertail & Stephan Cléménçon</i> |
| | 4.36 On survey sampling and empirical risk minimization <i>Stephan Cléménçon, Patrice Bertail & Emilie Chautru</i> |
| | 4.37 Recent advances in empirical processes for survey sampling <i>Patrice Bertail, Emilie Chautru & Stéphan Cléménçon</i> |
| | 4.38 Approximation of rejective sampling inclusion probabilities and nonparametric applications <i>Anne Ruiz-Gazen, Hélène Boistard & Hendrik Lopuhaä</i> |
| Room 3 “Gragal” | Invited Session: Nonparametrics and geometrical statistics |
| | Organizer & Chair: Victor Panaretos |
| | 4.39 Change point inference <i>Axel Munk, Klaus Frick & Hannes Sieling</i> |
| | 4.40 Multiple testing of local maxima for detection of peaks of Gaussian random fields <i>Armin Schwartzman & D. Cheng</i> |
| | 4.41 Elastic functional regression models <i>Anuj Srivastava, J. Derek Tucker & Wei Wu</i> |

- 15:00 - 17:00 4.42 Principal flows
Victor Panaretos
- Room 4**
“Cantabria”
- Invited Session: Empirical likelihood: shape constrained inference**
Organizer & Chair: Geurt Jongbloed
- 4.43 Bi-log-concave distribution and regression functions
Lutz Duembgen, Petro Kolesnyk & Ralf Wilke
- 4.44 Comparison of two nonparametric regression curves: test of superiority and noninferiority
Mervyn Silvapulle, Suman Rakshit & Pranab K. Sen
- 4.45 Shape constrained estimation in the Cox model
Rik. Lopuhaä & Tina Nane
- 4.46 Isotonic regression in several dimensions
Dragi Anevski & Wolfgang Polonik
- Room 5**
“Asturias”
- Invited Session: Semiparametric inference with incomplete data**
Organizer: Bruce Lindsay
Session Chair: Grace Yi
- 4.48 Semiparametric Methods with Mixed Measurement Error and Misclassification in Covariates
Grace Yi
- 4.49 Semiparametric inference of high-dimensional graphical models
Lingzhou Xue
- Room 6**
“Castilla”
- Invited Session: Time series analysis**
Organizer: Qiwei Yao
Session Chair: Wenyang Zhang
- 4.50 Nonparametric eigenvalue-regularized precision or covariance matrix estimator
Clifford Lam
- 4.51 An iterative estimation procedure for generalised varying-coefficient models with unspecified link functions
Wenyang Zhang
- 4.52 Extending the scope of cube root asymptotics
Myung Seo & Taisuke Otsu
- 4.53 Whittle likelihood for bivariate processes
Sofia Olhede, Adam M. Sykulski, Jeffrey J. Early, Jonathan M. Lilly & Frederik J. Simons

17:00 - 17:30

Coffee break

17:30 - 19:30 **Invited Session: High-dimensional regression analysis and large dimensional matrix**
Room 3
“Gregal” **Organizer & Chair: Qihua Wang**

- 4.57 Spline LASSO in high-dimensional linear regression
Bing-Yi Jing

Room 5
“Asturias” **Invited Session: Semiparametric treatment effect estimation**
Organizer & Chair: Stefan Andréas Sperlich

- 4.62 Practical procedures to circumvent support problems in program evaluation studies
Michael Lechner & Anthony Strittmatter
- 4.63 The changes-in-changes model with covariates
Blaise Melly & Giulia Santangelo
- 4.64 The effects of training incidence and duration on labor market transitions
Aderonke Osikominu, Bernd Fitzenberger & Marie Paul
- 4.65 Modeling heterogeneity by varying coefficient models
Stefan Andréas Sperlich

