



UNIVERSITY OF PIRAEUS
DEPARTMENT OF STATISTICS
AND INSURANCE SCIENCE



Bernoulli Society

Conference Program

28th European Meeting of Statisticians

EMS2010 |

17-22 August, 2010 | Piraeus, Greece

28th European Meeting of Statisticians

Conference Program

August	Tuesday, 17	Wednesday, 18	Thursday, 19	Friday, 20	Saturday, 21	Sunday, 22
8:00-9:00		Registration	Registration			
9:00-10:30		Welcome/ Opening Lecture	Forum Lecture Part I	Forum Lecture Part II	IPS 24-27	Special Invited Lecture VII (starts at 9:45)
10:30-11:00	Short courses	Coffee break	Coffee break	Coffee break	Coffee break	Coffee break
11:00-12:30		Special Invited Lectures I&II CPS 1-5	IPS 11-15	Special Invited Lectures III&IV CPS 14-18	Special Invited Lectures V&VI CPS 27-31	IPS 36-39
12:30-14:30	Lunch break	Lunch break	Lunch break	Lunch break	Lunch break	Lunch break
14:30-16:00		IPS 1-5	New Acropolis Museum guided tour	IPS 16-19	IPS 28-31	IPS 40-43
16:00-16:30	Short courses	Coffee break		Coffee break	Coffee break	Coffee break
16:30-18:00		IPS 6-10		IPS 20-23	IPS 32-35	CPS 40-47
18:00-19:30	Registration	CPS 6-13		CPS 19-26	CPS 32-39	Closing Lecture
19:30		Welcome buffet			PS	Conference end
21:00				Gala Dinner		

■ **IPS:** Invited Paper Session

■ **CPS:** Contributed Paper Session

■ **PS:** Poster Session



Welcome to the University of Piraeus and EMS 2010. The conference venue is located near the commercial centre of the city of Piraeus, 10 minutes walking distance from the shopping center, the taverns and the coffee shops of Microlimano and 20 minutes from the metro station of Piraeus.

Piraeus is the main port of Greece, situated very close to Athens, the capital of the country. Piraeus has a long history, dating back to ancient Greece. It is encompassed almost on all sides by sea and its life was always linked to the sea. Nowadays it is a vibrant city. Apart from the main harbour, which also serves as a link to all the islands of the Aegean Sea and the close-by islands of the Saronic Gulf, there are also many picturesque little bays such as Zea and Piraiki Akti that offer the opportunity to walk, dine and relax alongside the sea. One could start exploring the city by walking from Pasalimani to Microlimano and Kastella. In the heart of the city is Korai Square where the City Hall and the restored neoclassic building of the Municipal Theatre are located. It is worth visiting the Archaeological Museum of Piraeus and the Maritime Museum. The centre of Athens (Acropolis, Plaka, Monastiraki Flea Market, Archaeological Museum) are easily accessible from Piraeus by public transport (over-ground metro/bus) or by taxi. We encourage you to take this opportunity to explore Piraeus and Athens and to have both a productive and relaxing time here.

The registration fees of the conference include all coffee and tea breaks, lunches for the duration of the conference (18-22 of August), the welcome reception and the poster session buffets, the conference material (bags and the printed version of the program and the book of abstracts), a free guided tour at the New Acropolis Museum (inaugurated June 2009) and free access to public transportation in Athens for the period 17th-22nd of August.

The Local Organizing Committee would like to acknowledge the help and support received from a number of people. Individuals that were of particular help with the preparations for this meeting include the host Department's hard-working and resourceful administrative staff Areti Constantinou and Aris Sako as well as our graduate students who volunteered to undertake a lot of tasks before and during the conference. All of them will be happy to offer their help to the participants throughout the conference days.

We sincerely hope you will find your stay in Greece both enjoyable and rewarding.

Markos V. Koutras

Head of the LOC



Notes for the participants

The official language of the conference is English. Each conference room is equipped with a computer where presentation slides can be uploaded. This computer (with Windows, MS PowerPoint and Adobe Acrobat Reader) is supplemented with a computer projector. An overhead projector will also be available. Speakers are encouraged to use in their presentation slides large enough font size (at least 24 points) to enable comfortable viewing

- Special Invited Speakers (SIS) will have 45 minutes in total (40 minutes for delivering the talk and 5 minutes for questions).
- Each speaker in Invited Paper Sessions (IPS) will have 30 minutes in total (25 minutes for delivering the talk and 5 minutes for questions).
- Each Contributed Paper Session (CPS) will have 4 talks, 20 minutes each. After the first 2 talks in each CPS, 5 mins will be allocated for possible questions pertaining to the preceding 2 talks. The same procedure will be repeated for the last 2 talks.
- The poster board will be 98 cm wide and 110 cm high. Each poster board will be identified by a poster number. Refer to the poster session list (shown at the 19:30-21:00 time slot, on Saturday, August 21) to confirm the number assigned to each poster. The presenting author should be present during the poster presentation.

Important Notice

Session chairs are kindly requested to respect the talks starting times shown in the program so that the participants can switch between parallel sessions without the risk of missing the beginning of the talks they wish to attend. In case a speaker does not show up in a session, it is suggested that the time assigned to him be left unused. No talks should be shifted ahead or additional time be given to the other speakers of the session.

Scientific Programme Committee

Chair:

- **Enno Mammen** (*University of Mannheim, Germany*)

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Local Organizing Committee

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- **Georgia Verropoulou** (*University of Piraeus, Greece*)
- **Spyridon Vrontos** (*University of Piraeus, Greece*)

Conference Secretary: **Areti Konstantinou**

IT Support: **Aris Sako**



OPENING LECTURE

- **Alexandre Tsybakov**, Crest and Université Paris VI, France.
Title: *Trace Regression: Estimation of High-Dimensional Low Rank Matrices*

FORUM LECTURE

- **Tony Cai**, The Wharton School, University of Pennsylvania, USA.
Title: *Statistical Inference on Covariance Structure*

CLOSING LECTURE

- **Simon Tavaré**, Cambridge University, UK.
Title: *Approximate Bayesian Computation: Theory and Biological Applications*

SPECIAL INVITED SPEAKERS (SIS)

- **Jaromir Antoch**, Charles University in Prague, Czech Republic.
Title: *Recent trends in change point analysis*
- **Nicolò Cesa-Bianchi**, Università di Milano, Italy.
Title: *Sequential prediction problems on graphs*
- **Mark Podolskij**, ETH, Zurich, Switzerland.
Title: *Limit theorems for high frequency data*
- **Dimitris Politis**, University of San Diego, USA.
Title: *Model-free model fitting and predictive distributions*
- **Markus Reiss**, Humboldt University, Berlin, Germany.
Title: *Volatility estimation under microstructure noise and Le Cam theory*
- **Sylvia Richardson**, Centre for Biostatistics, School of Public Health, Imperial College, London, UK.
Title: *Recent developments in Bayesian statistical methods for Genomics*
- **Tomasz Schreiber**, Nicolaus Copernicus University, Torun, Poland.
Title: *Polygonal Markov fields for Bayesian imaging*

Social Events

20:00

Wednesday | August 18



Welcome Reception
at Apollo multi-purpose center
(Kaminia, Piraeus)

15:00

Thursday | August 19



Acropolis museum
guided tour

21:00

Friday | August 20



Gala Dinner
at Kostis Palamas Hall
(City of Athens Technopolis)



08:00 – 09:00

Registration

09:00 – 09:10

Welcome and opening ceremony

Auditorium

Opening Lecture

Chair: **Jean Jacod**, Université Paris VI, France

09:10–10:30

Trace Regression: Estimation of High-Dimensional Low Rank Matrices
A. Tsybakov (CREST and Université Paris VI, France)

10:30 – 11:00

Coffee Break

Room
A

11:00 – 12:30 Special Invited Lectures

Chair: **Rainer Dahlhaus**, Universität Heidelberg, Germany

11:00–11:45

Volatility estimation under microstructure noise and Le Cam theory
Markus Reiss (Humboldt University, Germany)

11:45–12:30

Recent developments in Bayesian statistical methods for Genomics
Sylvia Richardson (Centre for Biostatistics, School of Public Health, Imperial College, UK)

Room
101

11:00 – 12:30 Contributed Paper Sessions

CPS1. Time Series I

Chair: **Robert Kunst**, Institute for Advanced Studies Vienna, Austria.

11:00–11:20

Semi-parametric dynamic modeling of multivariate financial time series
F. Rigat (University of Warwick, UK)

11:20–11:40

On some multivariate integer-valued autoregressive models
X. Pedeli (Athens University of Economics and Business, Greece)

11:45–12:05

Asymptotic Expansions of the QMLEs in the EGARCH(1,1) model
D. Kyriakopoulou (University of Piraeus, Greece)

12:05–12:25

Asymmetric time aggregation and its potential benefits for forecasting annual data
R. Kunst (Institute for Advanced Studies Vienna, Austria).

Room
102

CPS2. Methods for Censored data I

Chair: **Thomas Scheike**, University of Copenhagen, Denmark.

- 11:00–11:20** *A monotone baseline hazard estimator in the Cox Proportional Hazards Model*
G. Nane (Delft University of Technology, Netherlands)
- 11:20–11:40** *Consistent estimators in the current status continuous mark model*
B. Witte (Delft University of Technology, Netherlands)
- 11:45–12:05** *Cross-validation in forward stepwise variable selection for Cox's proportional hazards model*
M. Shevlyakova (Ecole Polytechnique Federale de Lausanne, Switzerland)
- 12:05–12:25** *A Semiparametric Random Effects Model for Multivariate Competing Risks Data*
T. Scheike (University of Copenhagen, Denmark).

Room
103

CPS3. Design of Experiments

Chair: **Stratis Kounias**, University of Athens, Greece.

- 11:00–11:20** *Identification of active contrasts in unreplicated factorial designs*
P. Angelopoulos (National Technical University of Athens, Greece)
- 11:20–11:40** *Permutation tests in repeated measure ANOVA and mixed-model designs*
S. Kherad-Pajouh (University of Geneva, Switzerland)
- 11:45–12:05** *Detecting active effects in supersaturated designs*
A. Skountzou (National Technical University of Athens, Greece)
- 12:05–12:25** *On the optimal nonlinear experimental design and its applications*
C. Kitsos (Technological Educational Institute of Athens, Greece)

Room
104

CPS4. Generalized Linear Modeling

Chair: **Konstantinos Fokianos**, University of Cyprus, Cyprus.

- 11:00–11:20** *Generalized estimating equations for multinomial responses*
A. Touloumis (University of Florida, USA)
- 11:20–11:40** *Estimation of a semiparametric recursive bivariate probit model in the presence of Endogeneity*
G. Marra (University of Bath, UK)
- 11:45–12:05** *Interventions in Log-Linear Poisson autoregression*
K. Fokianos (University of Cyprus, Cyprus)
- 12:05–12:25** *Improved ridge estimator in partial linear models*
M. Roozbeh (Ferdowsi University of Mashhad, Iran).



Room
105

CPS5. Hypothesis Testing

Chair: **Simos Meintanis**, University of Athens, Greece.

11:00–11:20

Test strategies for inverse problems

C. Marteau (Institut de Mathematiques de Toulouse, France)

11:20–11:40

Testing nested distributions- An application on frailty models

P. Economou (University of Patras, Greece)

11:45–12:05

A simple misspecification test for regression models

S. Leoni-Aubin (Université de Technologie Compiègne, France)

12:05–12:25

Testing for vectorial double-exponential laws

K. Fragiadakis (University of Athens, Greece)

12:30 – 14:30

Lunch Break

14:30 – 16:00 Invited Paper Sessions

Room
A

IPS1. Causal Inference and Dynamic Models

Chair: **Vanesa Didelez**, University of Bristol, UK.

14:30–15:00

Statistical Inference in Dynamic Treatment Regimes

E. Lafer (University of Michigan, USA)

15:00–15:30

A Marginal Structural Model in Continuous Time

K. Roysland (University of Oslo, Norway)

15:30–16:00

Regret-regression for dynamic treatment with irregularly spaced observations

R. Henderson (Newcastle University, UK)

Room
102

IPS2. MCMC methods and applications

Chair: **Joesper Møller**, Aalborg University, Denmark.

14:30–15:00

Transforming spatial point processes into Poisson processes using random superposition

K. K. Berthelsen (Aalborg University, Denmark)

15:00–15:30

Computational complexity of MCMC algorithms in high dimensions

A. Beskos (University College of London, England)

15:30–16:00

Zero variance Markov chain Monte Carlo for Bayesian estimators

A. Mira (University of Insubria, Italy)

Room
103

IPS3. Large interacting probabilistic problems

Chair: **Peter Major**, Mathematical Institute of the Hungarian Academy of Sciences, Hungary.

14:30–15:00

Sharp estimates on the tail distribution of Gaussian polynomials

P. Major (Mathematical Institute of the Hungarian Academy of Sciences, Hungary)

15:00–15:30

Scaling limits of random matrices

B. Valko (University of Toronto, Canada)

15:30–16:00

Phase transitions in random evolutions of large scale structures: the Ising model as a case study

F. Martinelli (University of Roma, Italy)

Room
104

IPS4. Financial Statistics

(organized by Per Mykland)

Chair: **D. Tjøstheim**, University of Bergen, Norway

14:30–15:00

On Lead-Lag Estimation

M. Rosenbaum (Ecole Polytechnique, France)

15:00–15:30

Heavy Tails and Local Dependence

D. Tjøstheim (University of Bergen, Norway)

15:30–16:00

Estimation of Leverage Effect with High Frequency Data

Dan Christina Wang (University of Chicago, USA and University of Oxford, UK)

Room
105

IPS5. Anomalous diffusions

Chair: **Aleksander Weron**, Wroclaw University of Technology, Poland.

14:30–15:00

Universal generation of fractal statistics

I. Eliazar (Holon Institute of Technology, Israel)

15:00–15:30

Stochastic representations of anomalous diffusion processes and their applications

M. Magdziarz (Wroclaw University of Technology, Poland)

15:30–16:00

Cauchy problems in bounded domains and iterated processes

E. Nane (Auburn University, USA)

16:00 – 16:30

Coffee Break



16:30 – 18:00 Invited Paper Sessions

Room
A

IPS6. Extremes

Chair: **Vladimir Piterbarg**, Lomonossov Moscow State University, Russia.

16:30–17:00

Modeling and estimating the multivariate tail dependence

A. Krajina (Eurandom, Eindhoven University of Technology, The Netherlands)

17:00–17:30

Statistical analysis of extremal dependence

H. Drees (University of Hamburg, Germany)

17:30–18:00

Massive high excursions of Gaussian processes

J. Hübler (Bern University and Lomonossov Moscow State University)

Room
102

IPS7. Statistical analysis of non- and semi-parametric models under structural constraints

Chair: **Ingrid van Keilegom**, Université Catholique de Louvain, Belgium.

16:30–17:00

Testing for symmetry in inverse regression problems

M. Birke (Ruhr-Universität Bochum, Germany)

17:00–17:30

Measuring the discrepancy of a parametric model via local polynomial smoothing

A. El Ghouch (Université Catholique de Louvain, Belgium)

17:30–18:00

Structured non-and semi-parametric models

K. Yu (University of Mannheim, Germany)

Room
103

IPS8. Spatial temporal point processes

Chair: **Jorge Mateu**, University Jaume I of Castellon, Spain.

16:30–17:00

Structured spatio-temporal shot-noise Cox process models, with a view to modeling forest fires

J. Møller (Aalborg University, Denmark)

17:00–17:30

Fitting complex spatial point process models

J. B. Illian (University of St Andrews, UK)

Room
104

IPS9. Goodness of fit testing

Chair: **Simos Meintanis**, University of Athens, Greece.

16:30–17:00

Goodness-of-fit tests based on empirical characteristic functions

M. D. Jimenez (University of Sevilla, Spain)

17:00–17:30

Tests for the response distribution in generalized linear models

B. Klar (University of Karlsruhe, Germany)

17:30–18:00

Measuring goodness-of-fit in nonparametric unsupervised learning problems

J. Einbeck (University of Durham, UK)

Room
105

IPS10. Elective Inference and multiple testing

Chair: **Yoav Benjamini**, Tel Aviv University, Israel.

- 16:30–17:00** *Replicability analysis, with application to genome-wide association studies*
R. Heller (Technion, Israel)
- 17:00–17:30** *Sequential testing of logically related hypotheses*
J. Goeman (Leiden University, Holland)
- 17:30–18:00** *Hierarchical Testing of Subsets of Hypotheses*
Y. Benjamini (Tel Aviv University, Israel)

18:00 – 19:30 Contributed Paper Sessions

Room
A

CPS6. Statistical Methods in Image Analysis and networks

Chair: **Robert Mnatsakanov**, West Virginia University, USA.

- 18:00–18:20** *Bayesian object classification of TEM images*
B. Konomi (Texas A&M University, USA)
- 18:20–18:40** *The impact of partial information on network inference and characterization*
N. Katenka (Boston University, USA)
- 18:45–19:05** *Statistical image analysis and percolation theory*
M. Langovoy (EURANDOM, Netherlands)
- 19:05–19:25** *Image reconstruction via moments*
R. Mnatsakanov (West Virginia University, USA)

Room
B

CPS7. Goodness of fit testing

Chair: **Ioannis Koutrouvelis**, University of Patras, Greece.

- 18:00–18:20** *Transformations of type-II right censored samples in testing goodness-of-fit*
T. Fischer (RWTH Aachen University, Germany)
- 18:20–18:40** *Goodness-of-fit tests for multiplicative models with dependent data*
I. van Keilegom (Universite Catholique de Louvain, Belgium)
- 18:45–19:05** *Graphical tools and goodness-of-fit tests for assessing the gamma distribution*
I. Koutrouvelis (University of Patras, Greece)
- 19:05–19:25** *On the order of convergence of power divergence goodness-of-fit statistics to chi-squared distribution*
V. Zubov (Lomonosov Moscow State University, Russia)



Room
C

CPS8. Bayesian and Sequential Methods

Chair: **Rosalba Radice**, University of Bath, UK.

- 18:00–18:20** *On sequential prediction for arbitrary classes of discrete-valued processes*
D. Ryabko (INRIA Lille-Nord Europe, France)
- 18:20–18:40** *Nonparametric Bayesian estimation for the drift of a discretely observed diffusion*
F. van der Meulen (Delft University of Technology, Netherlands)
- 18:45–19:05** *Differential complexity analysis through targeted Bayesian network learning*
A. Gruber (Tel Aviv University, Israel)
- 19:05–19:25** *A Bayesian approach to phylogenetic networks*
R. Radice (University of Bath, UK)

Room
101

CPS9. Finance I

Chair: **Ilya Molchanov**, University of Bern, Switzerland.

- 18:00–18:20** *On optimal exercising of American options in discrete time for stationary and ergodic data*
M. Kohler (Technische Universitaet Darmstadt, Germany)
- 18:20–18:40** *Grasping economic jumps by sparse sampling using intradaily highs and lows*
S. Kloessner (Saarland University, Germany)
- 18:45–19:05** *Symmetries of probability distributions in view of applications to multiasset derivatives pricing*
I. Molchanov (University of Bern, Switzerland)
- 19:05–19:25** *A Statistical Theory of nonparametric estimation in economic experiments*
R. Seri (Università degli Studi dell'Insubria, Italy)

Room
102

CPS10. Bootstrap Methods

Chair: **Barbara Wieczorek**, Friedrich-Schiller-Universität Jean, Germany.

- 18:00–18:20** *Asymptotics and bootstrapping in errors-in-variables with dependent errors*
M. Pesta (Charles University in Prague, Czech Republic)
- 18:20–18:40** *M-smoothers and change-points with dependent random errors*
M. Maciak (Charles University in Prague, Czech Republic)
- 18:45–19:05** *Ratio type statistics for detection of changes in linear regression models and the bootstrap method*
B. Madurkayova (Charles University in Prague, Czech Republic)
- 19:05–19:25** *Asymptotic theory and blockwise bootstrap for the estimated empirical process based on weakly dependent observations*
B. Wieczorek (Friedrich-Schiller-Universität Jean, Germany)

Room
103

CPS11. Model Selection and Specification

Chair: **Teresa Ledwina**, Polish Academy of Sciences, Poland.

- 18:00–18:20** *Minimal and maximal p-value model selection criteria for density estimation*
M. Wojtys (Warsaw University of Technology, Poland)
- 18:20–18:40** *Adaptive circular deconvolution by model selection under unknown error distribution*
M. Schwarz (Catholic University of Louvain, Belgium)
- 18:45–19:05** *Evaluating large sample bias in misspecified model scenarios: A new computational approach*
S. Hossain (UAE University, United Arab Emirates)
- 19:05–19:25** *Two-sample test against one-sided alternatives*
T. Ledwina (Polish Academy of Sciences, Poland)

Room
104

CPS12. Asymptotics for stochastic processes

Chair: **Vygantas Paulauskas**, Vilnius University, Lithuania.

- 18:00–18:20** *Asymptotic results for spatial causal ARMA models*
N. Weber (University of Sydney, Australia)
- 18:20–18:40** *Moderate deviations and Laws of the iterated logarithm for hilbertian autoregressive processes*
M. Menneteau (University of Montpellier, France)
- 18:45–19:05** *BN decomposition and limit theorems for linear random processes and fields*
V. Paulauskas (Vilnius University, Lithuania)

Room
105

CPS13. Wavelets

Chair: **Olaf Kouamo**, Telecom paristech, France.

- 18:00–18:20** *Fast computation on wavelets coefficients covariance matrix of a generalized long memory process with application*
O. Kouamo (Telecom Paristech, France)
- 18:20–18:40** *Wavelet estimation of coefficients of time-varying linear system based on time-varying moving average processes*
P. Yoosefi Zouj (Islamic Azad University, Iran)
- 18:45–19:05** *On the wavelet expansion with an application to approximate the moments*
M. Fashandi (Ferdowsi University of Mashhad, Iran)

19:30 – 21:00

Welcome Buffet



08:00 – 09:00 Registration

Auditorium

Forum Lecture (Part I)

Chair: **Oleg Lepski**, Université de Provence, France

09:10–10:30 *Statistical Inference on Covariance Structure*
T. Cai (University of Pennsylvania, USA)

10:30 – 11:00 *Coffee Break*

11:00 – 12:30 Invited Paper Sessions

Room
A

IPS11. Partially identified stochastic models

Chair: **Ilya Molchanov**, University of Bern, Switzerland.

11:00–11:30 *Partial Identification Using Random Sets Theory*
F. Molinari (Cornell University, USA)

11:30–12:00 *Statistical Inference for Interval identified Parameters*
J. Stoye (New York University, USA)

12:00–12:30 *Partial identification and statistical planning*
A. Tetenov (Collegio Carlo Alberto, Italy)

Room
102

IPS12. Statistical Analysis of Microarray Data

Chair: **Lev Klebanov**, Charles University, Czech Republic.

11:00–11:30 *A hypothesis test for equality of Bayesian network models, with an application to gene set analysis*

A. Almudevar (University of Rochester, USA)

11:30–12:00 *Aggregation effect in microarray data analysis*
L. Klebanov (Charles University, Czech Republic)

Room
103

IPS13. Models and Inference for Ordered Data

Chair: **Udo Kamps**, RWTH Aachen University, Germany.

11:00–11:30

A modified functional delta method and its application to L-statistics and risk measures

E. Beutner (Maastricht University, The Netherlands)

11:30–12:00

Coherent systems with failure-dependent components

M. Burkschat (Otto von Guericke University Magdeburg, Germany)

12:00–12:30

Optimal censoring designs in progressive Type-II censoring

E. Cramer (RWTH Aachen University, Germany)

Room
104

IPS14. Financial time series

Chair: **Anders Rahbek**, University of Copenhagen and CREATES, Denmark.

11:00–11:30

Explicit martingale estimating functions for diffusions with jumps

M. Soerensen (University of Copenhagen and CREATES, Denmark)

11:30–12:00

Bandwidth Selection and Bias Corrections for Kernel Estimators of Diffusion Processes

S. Kanaya (Oxford University, UK)

12:00–12:30

Indirect estimation of AR-ARCH, GARCH-M and EGARCH models

C. Dahl (CREATES, Aarhus University, Denmark)

Room
105

IPS15. Experimental designs

Chair: **Christos Koukouvinos**, National Technical University of Athens, Greece.

11:00–11:30

Irreducible representations and the Kiefer ordering of moment matrices, with applications to mixture designs

T. Klein (Technische Universität München, Germany)

11:30–12:00

Row-Column designs under dependence

S. Kounias (University of Athens, Greece)

12:00–12:30

The algebraic method in experimental design: Betti numbers and interactions

H. P. Wynn (London School of Economics, UK)

12:30 – 14:30

Lunch Break



15:00

Thursday | August 19

**Acropolis museum
guided tour**



Auditorium

Forum Lecture (Part II)

Chair: **A. Antoniadis**, Université Joseph Fourier, France

09:10–10:30

Statistical Inference on Covariance Structure

T. Cai (University of Pennsylvania, USA)

10:30 – 11:00

Coffee Break

Friday August 20

Room
A

11:00 – 12:30 Special Invited Lectures

Chair: **Fabienne Comte**, Université Paris, France

11:00–11:45

Polygonal Markov fields for Bayesian imaging

Tomasz Schreiber (Nicolaus Copernicus University, Poland)

11:45–12:30

Limit theorems for high frequency data

Mark Podolskij (ETH, Switzerland)

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page

11:00 – 12:30 Contributed Paper Sessions

Room
101

CPS14. Functional data analysis and estimation

Chair: **Rituparna Sen**, University of California, USA.

11:00–11:20

Upper bounds for the errors' L_q -norms in the FFBS algorithm

C. Dubarry and S. Le Corff (Institut Telecom SudParis, France)

11:20–11:40

Adaptive projection estimation for a wide class of functional parameters

J. Aubin (Université de Technologie Compiègne, France)

11:45–12:05

Time Series of Functional Data

R. Sen (University of California, USA)

12:05–12:25

Wavelet-based estimation for weighted distribution based on censored data

E. Shirazi (Ferdowsi University of Mashhad, Iran)

Room
102

CPS15. Nonparametric Regression

Chair: **Juan Carlos Pardo-Fernandez**, Universidade de Vigo, Spain.

- 11:00–11:20** *Analysis of least squares regression estimates in case of additional errors in the variables*
A. Fromkorth (Technische University of Darmstadt, Germany)
- 11:20–11:40** *A longest run test for heteroscedasticity in univariate regression model*
S. Leoni-Aubin (Université de Technologie Compiègne, France)
- 11:45–12:05** *Iterative bias estimation for multivariate regression smoothers*
E. Matzner-Lober (Université Rennes, France)
- 12:05–12:25** *ROC curves in nonparametric location-scale regression models*
J. Pardo-Fernandez (Universidade de Vigo, Spain)

Room
103

CPS16. Independence

Chair: **Theofilos Cacoullos**, University of Athens, Greece.

- 11:00–11:20** *Subsampling weakly dependent time series and application to extremes*
S. Prohl (University of Zurich, Switzerland)
- 11:20–11:40** *On a new correlation coefficient, its orthogonal decomposition, and associated tests of independence*
W. Bergsma (London School of Economics, UK)
- 11:45–12:05** *F-tests of Homoscedasticity and Independence under Binormality*
T. Cacoullos (University of Athens, Greece)

Room
104

CPS17. Finance II

Chair: **Stefan Kloessner**, Saarland University, Germany.

- 11:00–11:20** *Information demand and stock market volatility*
N. Vlastakis (Athens University of Economics and Business, Greece)
- 11:20–11:40** *A multi – site multi-period equilibrium pricing model for rainfall derivatives*
M. Osipenko (Humboldt-Universitaet zu Berlin, Germany)
- 11:45–12:05** *Estimating standard and nonstandard stochastic volatility models using structured hidden Markov models*
R. Langrock (University of Goettingen, Germany)
- 12:05–12:25** *Testing separately for positive and negative jumps in financial data with high volatility of volatility*
S. Kloessner (Saarland University, Germany)



Room
105

CPS18. Medical Statistics

Chair: **Atanu Biswas**, Indian Statistical Institute, India.

- 11:00–11:20** *Stability of dietary patterns derived from a short term evaluation using multivariate statistic techniques*
V. Bountziouka (Harokopio University of Athens, Greece)
- 11:20–11:40** *Effect of socio-demographic and health related factors on mental health: A longitudinal study*
G. Verropoulou (University of Piraeus, Greece)
- 11:45–12:05** *Surgical operating time modeling and combinations for scheduling with mixture lognormal distributions*
Wan-Ping Hung (National Sun Yat-sen University, Taiwan)
- 12:05–12:25** *Multi-treatment optimal response-adaptive designs for phase III clinical trials*
A. Biswas (Indian Statistical Institute, India)

12:30 – 14:30

Lunch Break

14:30 – 16:00 Invited Paper Sessions

Room
102

IPS16. Statistical Inverse Problems

Chair: **Axel Munk**, University of Göttingen, Germany.

- 14:30–15:00** *Nonparametric Estimation in Deconvolution Problems*
A. Delaigle (University of Melbourne, Australia)
- 15:00–15:30** *On deconvolution of distribution functions*
A. Goldenshluger (University of Haifa, Israel)
- 15:30–16:00** *Iteratively Regularized Gauss-Newton Method for Nonlinear Inverse Problems with Noisy Operators*
F. Dunker (University of Göttingen, Germany)

Room
103

IPS17. Capture and Recapture and Related Methods in Ecology and Social Sciences

Chair: **Dankmar Böhning**, University of Reading, UK.

- 14:30–15:00** *Estimating the population size: from parametric to nonparametric, frequentist to Bayesian, and back again*
J. Bunge (Cornell University, USA)
- 15:00–15:30** *Heterogeneity Issues in Capture-Recapture Modelling*
L. Tardella (Sapienza Università di Roma, Italy)
- 15:30–16:00** *Capture-Recapture and Related Methods for Wildlife Abundance Estimation*
D. Borchers (University of St Andrews, Scotland)

Room
104

IPS18. Time Series

Chair: **Stathis Papanoditis**, University of Cyprus, Cyprus.

14:30–15:00

Particle filter-based on-line estimation of spot and cross volatility with nonlinear market microstructure noise models

R. Dahlhaus (University of Heidelberg, Germany)

15:00–15:30

Thick-pen transformation for time series

P. Fryzlewicz (London School of Economics, UK)

15:30–16:00

Simultaneous inference of linear models with time-varying coefficients

Z. Zhou (University of Toronto, Canada)

Room
105

IPS19. Mathematical Finance

(organized by **Stefan Weber**)

Chair: **Thomas Knispel**, Leibniz University Hannover, Germany.

14:30–15:00

Functional Ito calculus and the hedging of path-dependent derivatives

R. Cont (Columbia University, USA)

15:00–15:30

Optimal stopping under multiple priors

F. Riedel (Bielefeld University, Germany)

15:30–16:00

A new Approach to Risk Measures under Uncertainty

M. Stadje (Technical University of Eindhoven, Holland)

16:00 – 16:30

Coffee Break

16:30 – 18:00 Invited Paper Sessions

Room
102

IPS20. Multiscale estimation

Chair: **Maarten Jansen**, K. U. Leuven, Belgium.

16:30–17:00

Regularization and shrinkage for model selection in sparse models

A. Antoniadis (Université Joseph Fourier, France)

17:00–17:30

Variable selection by hard thresholding and information criteria under sparsity

M. Jansen (K. U. Leuven, Belgium)

17:30–18:00

Scale and Structure in Multidimensional Measurements

S. Olhede (University College London, UK)



Room
103

IPS21. Robust Statistics

Chair: **Neyko Neykov**, National Institute of Meteorology and Hydrology, Bulgarian Academy of Sciences, Bulgaria.

16:30–17:00

Robust Statistical Modelling with R

C. Agostinelli (Università Cà Foscari di Venezia, Italy)

17:00–17:30

Robustness Issues in Model Selection

M. Markatou (Cornell University, USA)

17:30–18:00

Accurate and Robust Indirect Inference

E. Ronchetti (University of Geneva, Switzerland)

Room
104

IPS22. Scan Statistics and Applications (Organized by Joseph Glaz)

Chair: **J. Chen**, University of Massachusetts, USA

16:30–17:00

Variable Window Scan Statistics for Poisson Process

J. Chen (University of Massachusetts, USA)

17:00–17:30

Scan statistic for independently marked point processes

E. Spodarev (Ulm University, Germany)

17:30–18:00

Asymptotic results for the multiple scan statistic

F. Milienos (University of Piraeus, Greece)

Room
105

IPS23. Nonparametric Econometrics

Chair: **Miguel Delgado**, Universidad Carlos III de Madrid, Spain.

16:30–17:00

Nonparametric Directional Model Checks

J. C. Escanciano (Indiana University, USA)

17:00–17:30

Adaptive rate-optimal detection of small autocorrelation coefficient

E. Guerre (Queen Mary College, UK)

17:30–18:00

Nonparametric Estimation of a Polarization Measure

O. B. Linton (London School of Economics, UK)

18:00 – 19:30 **Contributed Paper Sessions**Room
A**CPS19. Stochastic Geometry and Poisson Processes**Chair: **Viktor Benes**, Charles University in Prague, Czech Republic.

18:00–18:20

*Designing optimal alarm systems in space and time***A. Baxevani** (University of Gothenburg, Sweden)

18:20–18:40

*Poisson count processes: Ergodicity and goodness-of-fit***M. Neumann** (Friedrich Schiller University of Jena, Germany)

18:45–19:05

*A comparison of approximations for compound Poisson processes***R. Seri** (Università degli Studi dell'Insubria, Italy)

19:05–19:25

*On a two-stage model in stochastic geometry***V. Benes** (Charles University in Prague, Czech Republic)Room
B**CPS20. Environmental and Spatial Statistics**Chair: **Dionissios Hristopulos**, Technical University of Crete, Greece.

18:00–18:20

*Estimating the foraging movements and seasonal abundance of a top marine predator: sevengill sharks in coastal Tasmanian waters***E. Grist** (Environmental Research Institute, UK)

18:20–18:40

*Protest beliefs in contingent valuation: Latent variable and latent class models***L. Nunes** (Universidade Nova de Lisboa, Portugal)

18:45–19:05

*Estimating satellite versus debris collision probabilities via the adaptive splitting technique***R. Pastel** (ONERA)

19:05–19:25

*Spartan random fields and applications in the analysis of gappy spatial data***D. Hristopulos** (Technical University of Crete, Greece)Room
C**CPS21. MCMC**Chair: **Eric Moulines**, Telecom Paristech, France.

18:00–18:20

*A vanilla Rao-Blackwellisation of Metropolis-Hastings algorithms***R. Douc** (Telecom SudParis, France)

18:20–18:40

*Improving estimators based on Metropolis-Hastings algorithms***S. Malefaki** (University of Patras, Greece)

18:45–19:05

*Convergence of adaptive and interacting MCMC algorithms: beyond Markov chains***E. Moulines** (Telecom Paristech, France)



Room
101

CPS22. Regression

Chair: **Pedro Macedo**, University of Aveiro, Portugal.

18:00–18:20

Parametric quantile regression based on the generalized Gamma distribution

A. Noufaily (The Open University, UK)

18:20–18:40

Pairwise likelihood inference in latent variable models for ordinal longitudinal responses

V. Vasdekis (Athens University of Economics and Business, Greece)

18:45–19:05

Weakly universally consistent estimation of a regression function from stationary and ergodic data

D. Jones (Technische Universitaet Darmstadt, Germany)

19:05–19:25

A maximum entropy approach to select the ridge parameter

P. Macedo (University of Aveiro, Portugal)

Room
102

CPS23. Extremes

Chair: **Laszlo Markus**, Eötvös Loránd University, Hungary.

18:00–18:20

Exceedance probability of the integral of a stochastic process

C. Zhou (Erasmus University Rotterdam, Netherlands)

18:20–18:40

New estimators of the Pickands dependence function and a test for an extreme – value copula

S. Volgushev (Ruhr University Bochum, Germany)

18:45–19:05

Comparison of river flows models by their extremes

L. Markus (Eötvös Loránd University, Hungary)

19:05–19:25

A folding methodology for multivariate extremes with application to the estimation of the spectral probability measure

A. Guillo (University of Strasbourg/CNRS, France)

Room
103

CPS24. Time Series II

Chair: **Dominique Dehay**, University of Rennes, France.

18:00–18:20

Frequency and phase estimation in time series with quasi periodic components via a modification of the periodogram

K. Paraschakis (University of Heidelberg, Germany)

18:20–18:40

Empirical determination of the frequencies of an almost periodically correlated time series

D. Dehay (University of Rennes, France)

18:45–19:05

Specification tests for nonlinear time series models

I. Kheifets (Universidad Carlos III de Madrid, Spain)

Room
104

CPS25. Limit Theorems I

Chair: **Konstancja Bobecka**, Politechnika Warszawska, Poland.

- 18:00–18:20** *Asymptotically optimal Berry-Esseen-type bounds for distributions with an absolutely continuous part*
M. Boutsikas (University of Piraeus, Greece)
- 18:20–18:40** *Truncated moments of perpetuities and a central limit theorem for GARCH(1,1) processes*
A. Jakubowski (Nicolaus Copernicus University, Poland)
- 18:45–19:05** *Marcinkiewicz laws for strictly stationary sequences*
Z. S. Szewczak (Nicolaus Copernicus University, Poland)
- 19:05–19:25** *Factorial cumulants and central limit theorems*
K. Bobecka (Politechnika Warszawska, Poland)

Room
105

CPS26. Reliability and Quality Control

Chair: **Chiranjit Mukhopadhyay**, Indian Institute of Science, India.

- 18:00–18:20** *Prediction of repair times in a minimal repair process based on lifetimes of k-out-of-n systems*
S. M. T. Kamel Mirmostafae (Ferdowsi university of Mashhad & Iranian Foundation of Elites, Iran)
- 18:20–18:40** *Accelerated life tests of a series system with masked interval data under exponential lifetime distributions*
Tsai-Hung Fan (National Central University, Taiwan)
- 18:45–19:05** *Repairable system reliability estimation using information on repair times*
C. Mukhopadhyay (Indian Institute of Science, India)
- 19:05–19:25** *Nonparametric monitoring procedures*
M. Huskova (Charles University in Prague, Czech Republic)

21:00

Friday | August 20

Gala Dinner
at Kostis Palamas Hall
(City of Athens Technopolis)





09:00 – 10:30 Invited Paper Sessions

Room
102

IPS24. Limit Theorems

Chair: **Vyngantas Paulauskas**, Vilnius University, Lithuania.

09:00–09:30

The limit distribution of the maximum increment of a random walk

A. Rackauskas (Vilnius University, Lithuania)

09:30–10:00

Limit theorems for canonical U-statistics

R. Latala (University of Warsaw, Poland)

10:00–10:30

Central limit theorem for linear eigenvalue statistics of random matrices with independent entries

L. A. Pastur (Institute for Low Temperatures, Ukraine)

Room
103

IPS25. Case cohort studies

(Organized by **Michal Kulich**)

Chair: **X. Lin**, Harvard School of Public Health, USA

09:00–09:30

Current Status Data in Case-Cohort Studies

B. Nan (University of Michigan, USA)

09:30–10:00

Statistical methods for analysis of genome-wide association case-control and cohort studies

X. Lin (Harvard School of Public Health, USA)

10:00–10:30

Efficient and double-robust estimation in semiparametric odds ratio models for two-stage sampling designs

A. Rotnitzky (Di Tella University and Harvard University, Argentina)

Room
104

IPS26. Dimension reduction and factor modeling

Chair: **Qiwei Yao**, London School of Economics, UK.

09:00–09:30

Minimax Concave Penalized MLE for Generalized Linear Models

C. Zhang (University of Rutgers, USA)

09:30–10:00

Causal inference in high-dimensional systems based on observational data

M. Maathuis (ETH Zurich, Switzerland)

10:00–10:30

Estimation for Latent Factor Models for High-Dimensional Time Series

C. Lam (London School of Economics, UK)

Room
105

IPS27. Monitoring schemes for dependent data

Chair: **Marie Huskova**, Charles University, Czech Republic

- 09:00–09:30** *L-1 sequential procedures for change detection*
Z. Praskova (Charles University, Czech Republic)
- 09:30–10:00** *Robust online monitoring*
R. Fried (TU Dortmund University, Germany)
- 10:00–10:30** *Sequential Monitoring of High Frequency Portfolio Betas*
J. Steinebach (University of Cologne, Germany)

10:30 – 11:00

Coffee Break

Room
A

11:00 – 12:30 Special Invited Lectures

Chair: **Oliver Linton**, London School of Economics and Political Science, UK

- 11:00–11:45** *Model-free model fitting and predictive distributions*
Dimitris Politis (University of California, USA)
- 11:45–12:30** *Recent trends in change point analysis*
Jaromir Antoch (Charles University, Czech Republic)

11:00 – 12:30 Contributed Paper Sessions

Room
101

CPS27. Methods for Censored Data II

Chair: **Cedric Heuchenne**, Catholic University of Louvain, Belgium.

- 11:00–11:20** *Censored observations in a latent variable model framework*
K. K. Holst (University of Copenhagen, Denmark)
- 11:20–11:40** *A three – state semi – Markov model for left-, right- and interval-censored data based on the Weibull distribution*
V. Kapetanakis (University of Cambridge, UK)
- 11:45–12:05** *Testing for one-sided alternatives in nonparametric censored regression*
C. Heuchenne (Catholic University of Louvain, Belgium)
- 12:05–12:25** *Inference in conditional moment restrictions models in the presence of censoring*
V. Patilea (CREST-Ensaï and IRMAR-INSA, France)



Room
102

CPS28. Distributions

Chair: **Constantinos Petropoulos**, University of Patras, Greece.

11:00–11:20

Strawderman-type estimators for the scale parameter, the reciprocal of the scale parameter and the ratio of the scale parameters of exponential distributions

P. Bobotas (University of Patras, Greece)

11:20–11:40

Efficient estimator of the variance of a Gamma family distributions when coefficient of kurtosis is known

A. Unsal (DEU, Faculty of Arts and Sciences Department of Statistics, Turkey)

11:45–12:05

A study of generalized skew-normal distribution

Nan-Cheng Su (National Cheng-Kung University, Taiwan)

12:05–12:25

New classes of improved confidence intervals for the scale parameter of an exponential distribution

C. Petropoulos (University of Patras, Greece)

Room
103

CPS29. Copulas

Chair: **Katerina Orfanogiannaki**, Athens University of Economics and Business, Greece.

11:00–11:20

On modeling the increasing conditional dependence

P. Jaworski (University of Warsaw, Poland)

11:20–11:40

Positive Quadrant dependence and copulas

D. Sznajder (Katholieke Universiteit Leuven, Belgium)

11:45–12:05

Semiparametric goodness-of-fit test for copula density in the presence of dependent data

A. El Ghini (University of Lille, France)

12:05–12:25

Multivariate hidden Markov models for discrete data

K. Orfanogiannaki (Athens University of Economics and Business, Greece)

Room
104

CPS30. Graphs

Chair: **Edward Waymire**, Oregon State University, USA.

11:00–11:20

New consistent and asymptotically normal estimators for random graph mixture models

C. Matias (CNRS, France)

11:20–11:40

Ageing notions in the analysis of stochastic Petri nets

J. Alexin (RWTH Aachen University, Germany)

11:45–12:05

Exact and approximate recursive calculations for binary Markov random fields defined on graphs

H. Austad (Norwegian University of Science and Technology, Norway)

12:05–12:25

Tree Polymers: some recent results and conjectures

E. Waymire (Oregon State University, USA)

Room
105

CPS31. Genetics

Chair: **Cristina Gutierrez Perez**, University of Extremadura, Spain.

- 11:00–11:20** *Data integration in penalized regression models*
L. C. Bergersen (University of Oslo, Norway)
- 11:20–11:40** *Cross platform comparison of high – throughput genetic measurements using order restricted inference*
F. Klingmueller (Medical University of Vienna, Austria)
- 11:45–12:05** *Estimation of network granger causality*
G. Michailidis (The University of Michigan, USA)
- 12:05–12:25** *Parametric inference for Y – linked gene branching models: Expectation – maximization method*
C. Gutierrez Perez (University of Extremadura, Spain)

12:30 – 14:30

Lunch Break

14:30 – 16:00 Invited Paper Sessions

Room
102

IPS28. Stochastic Geometry and Stereology (Organized by Eva B. Vedel-Jensen)

Chair: **Viktor Benes**, Charles University, Czech Republic.

- 14:30–15:00** *The saucor, a geometric sampling scheme for estimating the Palm intensity function of spatial point processes*
U. Hahn (Aarhus University, Denmark)
- 15:00–15:30** *Variance of length or surface area estimates using periodic grids*
J. Janacek (Academy of Sciences, Czech Republic)
- 15:30–16:00** *Bayesian alignment of unlabelled marked point sets using random fields*
I. Dryden (University of Nottingham, UK)

Room
103

IPS29. Aggregation Methods

Chair: **Alexander Goldenshluger**, University of Haifa, Israel.

- 14:30–15:00** *Approximate computation of the exponentially weighted aggregate by Langevin Monte-Carlo*
A. Dalalyan (Ecole Nationale des Ponts et Chaussées, France)
- 15:00–15:30** *Combining Procedures For Optimality for Both Parametric and Nonparametric Scenarios*
Y. Yang (University of Minnesota, USA)
- 15:30–16:00** *On statistical applications of L1-recovery*
A. Juditsky (Université J. Fourier, France)



Room
104

IPS30. Generalised regression

(Organized by **Göran Kauermann**)

Chair: **A. Komárek**, Charles University, Czech Republic.

14:30–15:00

Semiparametric Quantile and Expectile Regression

T. Kneib (Carl von Ossietzky University Oldenburg, Germany)

15:00–15:30

On equivalent kernels for penalized splines

T. Krivobokova (Georg-August-Universität Göttingen, Germany)

15:30–16:00

Clustering based on joint continuous and discrete correlated data

A. Komárek (Charles University, Czech Republic)

Room
105

IPS31. Stochastic Models in Finance

Chair: **Rama Cont**, CNRS - Universite de Paris VI, France.

14:30–15:00

Default contagion and systemic risk in financial networks

A. Moussa (Columbia University, USA)

15:00–15:30

Stochastic modeling of order books: high-frequency dynamics and diffusion limits

A. Larrard (Université de Paris VI, France)

15:30–16:00

A multiclass queuing model of limit order book dynamics

C. Maqlaras (Columbia University, USA)

16:00 – 16:30

Coffee Break

16:30 – 18:00 Invited Paper Sessions

Room
102

IPS32. Forensic DNA analysis

(Organized by **Julia Mortera**)

Chair: **Robert Cowell**, Cass Business School, London, UK.

16:30–17:00

Forensic-statistical DNA analysis: lessons from the low countries

R. Gill (Leiden University, Netherlands)

17:00–17:30

Complex DNA mixture analysis

R. Cowell (Cass Business School, London, UK)

Room
103

IPS33. Stochastic processes with applications in biology and geophysics

(organized by **Marco Dozzi**)

Chair: **Susanne Ditlevsen**, Københavns Universitet, Denmark.

- 16:30–17:00** *Sustained oscillations for density dependent Markov processes*
P. Greenwood (Arizona State University, USA)
- 17:00–17:30** *The stochastic Morris – Lecar neuron model embeds a one-dimensional diffusion and its first-passage-time crossings*
S. Ditlevsen (Københavns Universitet, Denmark)
- 17:30–18:00** *Nonparametric estimation of earthquake occurrence rate on Northern Aegean Sea*
I. Votsi (Aristotle University of Thessaloniki, Greece)

Room
104

IPS34. Statistical applications in demography

Chair: **Nico Keilman**, University of Oslo, Norway.

- 16:30–17:00** *On a class of two-sex models*
J. Alho (University of Joensuu, Finland)
- 17:00–17:30** *Uncertainties in migration and population studies: From estimation to decision support*
J. Bijak (University of Southampton, UK)
- 17:30–18:00** *Estimating age-specific mortality patterns from grouped data: Why and how?*
A. Kostaki (University of Economics and Business, Greece)

Room
105

IPS35. Adaption in nonparametric estimation (organized by **Dominique Picard**)

Chair: **Enno Mammen**, University of Mannheim, Germany.

- 16:30–17:00** *Sup-norm oracle inequality in the density estimation*
O. Lepski (University of Marseille, LATP, France)
- 17:00–17:30** *Nonparametric regression with nonparametrically generated covariates*
E. Mammen (University of Mannheim, Germany)
- 17:30–18:00** *Adaptive Dantzig density estimation*
V. Rivoirard (Université Paris Sud – Orsay, Ecole Normale Supérieure, France)



18:00 – 19:30 Contributed Paper Sessions

Room
A

CPS32. Reliability

Chair: **Serkan Eryilmaz**, Izmir University of Economics, Turkey.

18:00–18:20

Start-up demonstration tests under dependence
F. Yalcin (Izmir University of Economics, Turkey)

18:20–18:40

Signature based analysis of consecutive-k systems
M. Ozkut (Izmir University of Economics, Turkey)

18:45–19:05

Reliability properties of $m - k - out - of - n: F$ systems with exchangeable components
I. Triantafyllou (University of Piraeus, Greece)

19:05–19:25

Dynamic reliability and performance analysis of multi-state systems
S. Eryilmaz (Izmir University of Economics, Turkey)

Room
B

CPS33. Geometrical Statistics

Chair: **Victor Panaretos**, Swiss Federal Institute of Technology (EPFL), Switzerland.

18:00–18:20

Some statistical issues in fingerprint analysis
A. Munk (University of Göttingen, Germany)

18:20–18:40

Nonparametric density estimation in the hyperbolic plane via Moebius deconvolution
S. Huckemann (University of Göttingen, Germany)

18:45–19:05

Statistical tests of uniformity on the hypersphere
R. Seri (Università degli Studi dell'Insubria, Italy)

19:05–19:25

Second - order comparison of Gaussian random functions and the geometry of DNA
V. Panaretos (Swiss Federal Institute of Technology (EPFL), Switzerland)

Room
C

CPS34. Dynamic Modeling and Regression

Chair: **Maciej Wilczynski**, Wroclaw University of Technology, Poland.

18:00–18:20

Dynamic panel data models with random effects by restricted regression
S. Papadopoulos (Democritus University of Thrace, Greece)

18:20–18:40

Censored Gamma Regression Models with an Application to Loss Given Default
F. Sigrist (ETH Zürich, Switzerland)

18:45–19:05

Genetics and/of basket options
E. Silyakova (Humboldt-University of Berlin, Germany)

19:05–19:25

Minimax prediction in the linear model with a relative squared error
M. Wilczynski (Wroclaw University of Technology, Poland)

Room
101

CPS35. Finance III

Chair: **Marco Scarsini**, LUISS, Italy.

- 18:00–18:20** *Locally stationary multiplicative volatility modelling*
M. Vogt (University of Mannheim, Germany)
- 18:20–18:40** *Parameter uncertainty in portfolio selection: shrinking the inverse covariance matrix*
A. Kourtis (Athens University of Economics and Business, Greece)
- 18:45–19:05** *Optimal long term investment under model ambiguity*
T. Knispel (Leibniz University of Hannover, Germany)
- 19:05–19:25** *Fear of Loss, Inframodularity and Transfers*
M. Scarsini (LUISS, Italy)

Room
102

CPS36. Stochastic Processes I

Chair: **Mario Lefebvre**, Ecole Polytechnique, France.

- 18:00–18:20** *Some characterizations of mixed Poisson processes*
D. Lyberopoulos (University of Piraeus, Greece)
- 18:20–18:40** *Statistical inference for multidimensional time-changed Levy processes based on low-frequency data*
D. Belomestny (WIAS, Germany)
- 18:45–19:05** *Numerical methods for the Levy LIBOR model*
A. Papapantoleon (TU Berlin, Germany)
- 19:05–19:25** *Controlling a two-dimensional diffusion process at most until a fixed time*
M. Lefebvre (Ecole Polytechnique, France)

Room
103

CPS37. Limit Theorems II

Chair: **Jacek Wesolowski**, Politechnika Warszawska, Poland.

- 18:00–18:20** *Central limit theorem approximation for the number of runs*
G. Mytalas (Athens University of Economics and Business, Greece)
- 18:20–18:40** *Central limit theorem and influence function of the MCD estimators at general multivariate distributions*
R. Lopuhaa (Delft University of Technology, Netherlands)
- 18:45–19:05** *A distribution-free transform of the residuals sample autocorrelations with application to model checking*
C. Velasco (Universidad Carlos III de Madrid, Spain)
- 19:05–19:25** *Asymptotics of divergent perpetuities*
J. Wesolowski (Politechnika Warszawska, Poland)



Room
104

CPS38. Estimation

Chair: **Andreas Tsanakas**, City University London, UK.

18:00–18:20

A new class of optimal estimating functions in the presence of a nuisance parameter
G. Tzavelas (University of Piraeus, Greece)

18:20–18:40

On threshold estimation in threshold vector error correction models
F. Greb (University of Göttingen, Germany)

18:45–19:05

Distribution estimators and confidence intervals for Cavalieri estimators
J. Ziegel (The University of Melbourne, Australia)

19:05–19:25

On the bias of tail function estimation in exponential families
A. Tsanakas (City University London, UK)

Room
105

CPS39. Prediction

Chair: **Patricia A. Filipe**, University of Evora, Portugal.

18:00–18:20

Effect of unit root tests on prediction intervals for an unknown mean Gaussian AR(1) process with additive outliers
Sa-aat Niwitpong (King Mongkut's University of Technology North Bangkok, Thailand)

18:20–18:40

Forward – looking estimation of the government final consumption and of social benefits other than social transfers in kind using the Hungarian Budget Act
Z. Munkacsi (Office of the Fiscal Council, Hungary)

18:45–19:05

Universal rates for forecasting the residual waiting time
G. Morvai (MTA-BME Stochastics Research Group, Hungary)

19:05–19:25

Individual growth: modeling and prediction by stochastic differential equations
P. A. Filipe (University of Evora, Portugal)

19:30 – 20:30 Poster Session

Please use the numbers assigned to the articles shown below to locate the poster presentation you are interested in. The presenting author will be present during the poster presentation for discussing his work with the participants.

- P1.** *Testing uniform association in ordered cross-classifications*
V. Alba-Fernandez (University of Jaén, Spain) and **M. D. Jimenez-Gamero** (University of Sevilla, Spain)
- P2.** *Multivariate Linear Regression Model with Elliptically Contoured Distributed Errors and Monotone Missing Dependent Variables*
A. Batsidis and **K. Zografos** (University of Ioannina, Greece)
- P3.** *A compound rule for monitoring and controlling high quality processes*
S. Bersimis, M. V. Koutras (University of Piraeus, Greece) and **P. E. Maravelakis** (University of Aegean, Greece)
- P4.** *Process monitoring of bivariate Poisson data*
S. Bersimis (University of Piraeus, Greece) and **P. E. Maravelakis** (University of Aegean, Greece)
- P5.** *Repeatability and Reliability of Food Frequency Assessment Tools in association with the number of items included*
V. Bountziouka (Harokopio University, Greece) and **D. Panagiotakos** (Harokopio University, Greece)
- P6.** *Robust bioequivalence tests for 2x2 crossover designs*
Y. Chen (National Central University, Taiwan)
- P7.** *Marginal regression approach in cure models with clustered discrete survival data*
Y. Chi, Y. Chen and **P. Su** (National Cheng Kung University, Taiwan)
- P8.** *Sequential Monitoring of Changes in (Regression) Quantiles*
O. Chochola (Charles University of Prague, Czech Republic)
- P9.** *On the selection of a proper design for factorial experiments*
H. Evangelaras (University of Piraeus, Greece)
- P10.** *On the rate of convergence of regression-based Monte Carlo methods for pricing American options*
T. Felber and **M. Kohler** (Technische Universität Darmstadt, Germany)
- P11.** *Bootstrap Confidence Limits for Interval Censored Data in Oral Health Research*
R. Gron (University of Copenhagen, Denmark)
- P12.** *Regression quantiles with measurement errors*
D. Ioannides (University of Macedonia, Greece)



- P13.** *On random maximum-stable families of distributions and applications*
V. Koutras (University of Piraeus, Greece)
- P14.** *Services sectors' agglomeration and its interdependence with industrial agglomeration in the European Union*
A. Krenz (University of Goettingen, Germany)
- P15.** *Eliciting a prior distribution combining various sources*
J. Martin, C. J. Perez and M. J. Rufo (University of Extremadura, Spain)
- P16.** *A hybrid Classical-Bayesian framework for the design and analysis of 2-stage clinical trials with multivariate responses. Applications to Brain Imaging trials*
G. Minas, F. Rigat and T. Nichols (University of Warwick, UK)
- P17.** *Approximations for Markov Chain Imbeddable Systems*
F. Milienos and M. V. Koutras (University of Piraeus, Greece)
- P18.** *Statistics analyzes of professional driver`s labour market in Poland*
I. Mitraszewska, G. Nowaski and T. Kaminski (Motor Transport Institute, Poland)
- P19.** *Controlled Branching Processes in Varying Environment: asymptotic behavior*
M. Mota, I. del Puerto and A. Ramos (University of Extremadura, Spain)
- P20.** *Application of statistical techniques in monitoring specific supply procedures*
C. Nikou (Hellenic Open University, Greece)
- P21.** *Point Estimation for the General Half-Normal Distribution*
A. Nogales and P. P. Perez (University of Extremadura, Spain)
- P22.** *Statistical analysis of agricultural probability of loss: an application of extreme value theory*
V. Ozaki, P. Faria and R. Olinda (Escola Superior de Agricultura "Luiz de Queiroz", Spain)
- P23.** *Stock market bubbles and crises: The case of East Asian emerging markets*
E. Panopoulou (University of Piraeus, Greece) **and T. Pandelidis** (University of Crete, Greece)
- P24.** *Statistical Inference for differential equations driven by rough paths*
A. Papavasiliou (University of Crete, Greece) **and C. Ladroue** (University of Warwick, UK)
- P25.** *System of statistical indicators for the national defense and security sector*
J. Perdomo (Universidad Central de Venezuela, Venezuela)
- P26.** *The CSDF start-up demonstration test under Markovian dependence*
A. Rakitzis (University of Central Greece, Greece), **D. Antzoulakos** and **M. V. Koutras** (University of Piraeus, Greece)

- P27.** *An extension of the Minimum Distance Probability Algorithm for Kernel-based Pattern Analysis*
F. Reverter, E. Vegas and J. M. Oller (University of Barcelona, Spain)
- P28.** *High-dimensional sparse covariance estimation via directed acyclic graphs*
P. Rütimann and P. Bühlmann (ETH Zentrum, Switzerland)
- P29.** *The geo-statistical dimension of agro-environmental indicators: A preliminary analysis from a Mediterranean case study*
L. Salvati (Italian National Institute of Statistics, Italy)
- P30.** *Estimation of Parameter for Exponentiated Gamma distribution in the presence of one outlier*
A. Shadrokh and H. Pazira (University of Payame Noor of Tehran)
- P31.** *Nonparametric robust estimates*
V. Simakhin (Kurgan State University, Russia)
- P32.** *Knowledge Spaces of stochastic objects*
M. Sotiropoulos (A.S.P.E.T.E., Greece)
- P33.** *Tests for outliers in the Inverse Gaussian distribution, with application to first hitting time models*
D. Stogiannis (National Technical University of Athens, Greece)
- P34.** *Hilbert Spaces Formed by Strongly Harmonizable S_α Processes: ARMA Models and Prediction*
B. Tarami (Yasouj University, Iran)
- P35.** *On Numerical Solution of Eigenvalues of Random Matrices*
B. Tarami and P. Yoosefi Zouj (Islamic Azad University, Iran)
- P36.** *Likelihood inferences for the link function without knowing the true underlying distributions*
Tsung-Shan Tsou (National Central University, Taiwan)
- P37.** *Retrospective Environmental Risk Assessment Study of Lake Lanao, Mindanao Philippines*
S. Unde (Iligan City East High School, Philippines), **R. A. Saavedra** (Iligan City East High School, Philippines), **A. Jumaani** (Philippine Ports Authority, Philippines) and **S. L. Delina** (Philippine Ports Authority, Philippines)
- P38.** *Carbon Stocks Assessment in Mini Forest Ecosystem*
S. Unde (Iligan City East High School, Philippines) and **F. A. Serapio** (Mindanao State University-Iligan City East High School, Philippines)
- P39.** *Asset-Liability Management for Pension Funds in a Time-Varying Volatility Environment Using Factor Models*
S. Vrontos (University of Piraeus, Greece), **J. Vrontos** (Athens University of Economics and Business, Greece) and **L. Meligkotsidou** (University of Athens, Greece)



P40. *Study on Application of Dynamic Input-Output Method in Water Conservancy Project*
W. Yinyin (Hohai University, China)

P41. *An Application of Particle Filter to a Point Process of Discs*
M. Zikmundova (Charles University in Prague, Czech Republic)

Room
A

09:45 – 10:30 Special Invited Lectures

Chair: **Anatoli Juditski**, Université Joseph Fourier, France

09:45–10:30

Sequential prediction problems on graphs

Nicolò Cesa-Bianchi (Università degli Studi di Milano, Italy)

10:30 – 11:00

Coffee Break

11:00 – 12:30 Invited Paper Sessions

Room
102

IPS36. Duration analysis

Chair: **Gerard van den Berg**, Free University Amsterdam, Netherlands.

11:00–11:30

Estimation of Direct Effects for Survival Data using Aalen's additive hazards Model

M. Gerster (University of Southern Denmark, Denmark)

11:30–12:00

Semiparametric tests of competing risks dependence using covariates

G. Effraimidis (University of Mannheim, Germany)

12:00–12:30

Aging and Heterogeneity in the Analysis of Mortality

G. van den Berg (Free University Amsterdam, Netherlands)

Room
103

IPS37. Game-theoretic methods in machine learning

Chair: **Claudio Gentile**, Università dell'Insubria, Italy.

11:00–11:30

Littlestone's Dimension and Online Learnability

S. Shalev-Shwartz (The Hebrew University of Jerusalem, Israel)

11:30–12:00

Online Learning: Random Averages, Combinatorial Parameters, and Learnability

A. Rakhlin (University of Pennsylvania, USA)

12:00–12:30

Efficient selective sampling algorithms and minimax rates

C. Gentile (Università dell'Insubria, Italy)



Room
104

IPS38. Spatial Statistics

(organized by Antti Penttinen)

Chair: **Yongtao Guan**, Yale School of Public Health, USA

11:00–11:30

Estimating individual-level risk in spatial epidemiology using spatially aggregated information on the population at risk

Yongtao Guan (Yale University, USA)

11:30–12:00

Fast approximate inference and spatio-temporal modelling

D. Simpson (NTNU, Trondheim, Norway)

12:00–12:30

Inferring spatio-temporal dynamics of a pest from invasion front data

S. Soubeyrand (INRA, Avignon, France)

Room
105

IPS39. Dependence in probability and statistics

Chair: **Michael Neumann**, Friedrich-Schiller-Universität Jena, Germany.

11:00–11:30

Weak dependence, some Models and some Applications

P. Doukhan (University Cergy Pontoise, France)

11:30–12:00

Degenerate U – statistics under weak dependence: Asymptotics and bootstrap consistency

A. Leucht (Friedrich-Schiller-Universität Jena, Germany)

12:00–12:30

Estimation of high dimensional covariance matrices in time series

W. B. Wu (University of Chicago, USA)

12:30 – 14:30

Lunch Break

14:30 – 16:00 Invited Paper Sessions

Room
102

IPS40. Statistics for discretely observed semimartingales

Chair: **Jean Jacod**, Université Paris VI, France.

14:30–15:00

Estimation for Lévy processes from high frequency data within a long time interval

F. Comte (Université René Descartes, France)

15:00–15:30

Approximate LAD type estimation of discretely observed processes

H. Masuda (Kyushu University, Japan)

15:30–16:00

Estimation of Jump Tails

V. Todorov (Northwestern University, USA)

Room
103

IPS41. Coupling in Statistics

Chair: **Hermann Thorisson**, University of Iceland, Iceland.

14:30–15:00

Performing the Impossible Coupling
R. Gill (Leiden University, Netherlands)

15:00–15:30

Shy and unusual Brownian couplings
W. Kendall (University of Warwick, UK)

15:30–16:00

Coupling and Convergence in Density and in Distribution
H. Thorisson (University of Iceland, Iceland)

Room
104

IPS42. Applied Markov models

Chair: **Nicolaos Limnios**, Université de Technologie de Compiègne, France.

14:30–15:00

Smoothed estimation of homogeneous semi-Markov processes
M. L. Gamiz (University of Granada, Spain)

15:00–15:30

Estimating and predicting events in multicentre clinical trials with waiting time to response
V. Anisimov (GlaxoSmithKline, UK)

15:30–16:00

Semi – Markov models for multi – state processes. Application to heart transplant data
C. Huber (University of Rene Descartes, Paris)

Room
105

IPS43. The Statistics of Electoral Systems

Chair: **Friedrich Pukelsheim**, Universitaet Augsburg, Germany.

14:30–15:00

The 2009 European Parliament elections: 27 Ways to translate Votes into Seats
K. Oelbermann (Universitaet Augsburg, Germany)

15:00–15:30

Properties for a proportional electoral system
V. R. Gonzáles (University of Granada, Spain)

15:30–16:00

Greatest Remainder Bi-proportional Rounding and the Greek Elections of 2007
C. Tsitouras (TEI of Chalkis, Greece)

16:00 – 16:30

Coffee Break



16:30 – 18:00 Contributed Paper Sessions

Room
A

CPS40. Robustness

Chair: **M. Markatou**, Cornell University, USA.

16:30–16:50

Sensitivity analysis of nongaussianity by projection pursuit
Y. Huang (National Chung Cheng University, Taiwan)

16:50–17:10

Robust kernel principal component analysis
Su-Yun Huang (National University of Kaohsiung, Taiwan)

17:15–17:35

An extension of the maximum entropy robust regression group estimators: the MERGE estimators
P. Macedo (University of Aveiro, Portugal)

17:35–17:55

Fitting of extreme values using the trimmed likelihood estimator
Neyko Neykov (Bulgarian Academy of Sciences, Bulgaria)

Room
B

CPS41. Ordered data and Reliability

Chair: **Maria Kateri**, University of Ioannina, Greece.

16:30–16:50

Prediction intervals for order statistics intervals
J. Ahmadi (Ferdowsi University of Mashhad, Iran)

16:50–17:10

Multiple samples step-stress experiments
M. Kateri (University of Ioannina, Greece)

17:15–17:35

Minimal repair under a step-stress test
U. Kamps (RWTH Aachen University, Germany)

17:35–17:55

Sequential order statistics: An exponential family approach
S. Bedbur (RWTH Aachen University, Germany)

Room
C

CPS42. Statistical Process Control

Chair: **Ghislain Verdier**, Ecole Nationale Supérieure des mines de Saint-Étienne, France.

16:30–16:50

Improving S-control charts using variable sampling intervals and runs rules
A. Rakitzis (University of Central Greece, Greece)

16:50–17:10

A nonparametric multivariate EWMA control chart
G. Verdier (Ecole Nationale Supérieure des mines de Saint-Étienne, France)

17:15–17:35

Bayesian statistical process control for count type data
P. Tsiamyrtzis (Athens University of Economics and Business, Greece)

17:35–17:55

A CUSUM Control Chart for Monitoring Process Dispersion when the Variance is Estimated
P. Maravelakis (University of the Aegean, Greece)

Room
101

CPS43. Applied statistics and Testing

Chair: **M. Alrasheedi**, King Faisal University, Saudi Arabia.

- 16:30–16:50** *Generalized p-value for the normal mean with known coefficient of variation*
S. Niwitpong (King Mongkut's University of Technology North Bangkok, Thailand)
- 16:50–17:10** *Test for association for quantitative traits based on nuclear families in the presence of imprinting effects*
Wing Kam Fung (The University of Hong Kong, China)
- 17:15–17:35** *Semiparametric smoothing of discrete failure time data*
D. Bagkavos (Information Resources Hellas, Greece)
- 17:35–17:55** *Teaching quantitative methods in business schools in Saudi Arabia: the current status and directions*
M. Alrasheedi (King Faisal University, Saudi Arabia)

Room
102

CPS44. Programming and Software

Chair: **Roman Lisnanski**, Bar-Ilan University, Israel.

- 16:30–16:50** *gSDE: a friendly software for stochastic growth models*
N. Brites (University of Evora, Portugal)
- 16:50–17:10** *Expectation – Maximization algorithm applications in digital communications*
R. Lisnanski (Bar-Ilan University, Israel)
- 17:15–17:35** *Improvement of CPU time of linear discriminant function by IP*
S. Shinmura (Seikei Univ. Faculty of Economics, Japan)
- 17:35–17:55** *Approximations for robust optimization programs*
R. Seri (Università degli Studi dell'Insubria, Italy)

Room
103

CPS45. Stochastic Processes II

Chair: **Sonia Malefaki**, University of Patras, Greece.

- 16:30–16:50** *Generalized space – time autoregressive modeling*
D. Urwatul Wutsqa (Yogyakarta State University, Indonesia)
- 16:50–17:10** *Spectral representation of discrete time multi – dimensional self – similar processes*
S. Rezakhah (Amirkabir University of Technology, Iran)
- 17:15–17:35** *Flexible sampling of semi self – similar Markov processes: Covariance and Spectrum*
N. Modarresi (Amirkabir University of Technology, Iran)
- 17:35–17:55** *Reliability of repairable maintained systems under non – Markovian hypothesis*
S. Malefaki (University of Patras, Greece)



Room
104

CPS46. Penalized Likelihood and Regression

Chair: **Tatiana Apanasovich**, Thomas Jefferson University, USA.

16:30–16:50

L1 – penalized maximum likelihood estimation for sparse polytomic regression models

S. Chretien (Universite de Franche Comte, France)

16:50–17:10

Distributional results for penalized maximum likelihood and thresholding estimators in Gaussian regression

U. Schneider (University of Goettingen, Germany)

17:15–17:35

A group screening method for the statistical analysis of data from mixed – level supersaturated designs

K. Mylona (Universiteit Antwerpen, Belgium)

17:35–17:55

Asymptotics of penalized splines for general degree splines and general order penalties

T. Apanasovich (Thomas Jefferson University, USA)

Room
105

CPS47. Adaptive Estimation

Chair: **Leonid Sirota**, Bar-Ilan University, Israel.

16:30–16:50

Adaptive nonparametric instrumental regression by model selection

M. Schwarz (Université Catholique de Louvain, Belgium)

16:50–17:10

Adaptive estimation of volatility under microstructure noise

J. Schmidt-Hieber (Institut fuer Mathematische Stochastik, Germany)

17:15–17:35

On two estimates related to the change – point problem

F. Enikeeva (Institute for Information Transmission Problems of Russian Academy of Science, Russia)

17:35–17:55

Adaptive optimal estimation in modular spaces

L. Sirota (Bar-Ilan University, Israel)

Auditorium

Closing Lecture

Chair: **Richard Gill**, Leiden University, Netherlands

18:00–19:30

Approximate Bayesian Computation: Theory and Biological Applications

S. Tavaré (Cambridge University, UK)

S P O N S O R S



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