The 21th Conference of the Romanian Society of Probability and Statistics

Bucharest, April 13,14, 2018

Invited Speakers

Jean-Marc Bardet (Univ. Paris 1, France)
Marianne Clausel (Univ. de Lorraine, France)
Dan Crisan (Imperial College, London, UK)
Madalina Deaconu (Inria Nancy, France)
Alexandros Karagrigoriou (Univ. Aegean, Greece)
Francesco Russo (ENSTA ParisTech, France)
Ionel Popescu (FMI/IMAR, Romania, and Georgia Tech, USA)
Vincent Vandewalle (Univ. Lille 2, France)
Ali Suleyman Ustunel (Bilkent Univ., Ankara, Turkey)

The conference is organized by
the Romanian Society of Probability and Statistics,
the Academy for Economical Studies, Bucharest,
"Gheorghe Mihoc-Caius Iacob" Institute of Mathematical Statistics and Applied Mathematics, and
Simion Stoilow Institute of Mathematics of the Romanian Academy

Conference location: The Academy for Economical Studies, Bucharest, Piata Romana

***Web page*: http://spsr.csm.ro/spsr2018**

PROGRAMUL CONFERINŢEI SPSR 2018

Secţiuni:

1. **Probabilităţi şi Procese Stochastice**
2. **Statistică**
3. **Actuariat şi Matematici Financiare**
4. **Modelare Statistică cu Aplicaţii**
5. **Entropii, Divergenţe şi Selecţia modelului**

Vineri 13 aprilie

Academia de Studii Economice Bucureşti (Calea Dorobanţi 15–17)

8:30 – 9:00 ***Primirea şi înregistrarea participanţilor*** **(Sala 2102)**
9:00 – 9:05 ***Cuvânt de deschidere*** **– Ciprian Tudor (Sala 2102)**
9:05 – 10:35 ***Sesiune plenară 1*** **(Sala 2102)**
10:35 – 11:00 ***Pauză de cafea***
11:00 – 12:30 ***Sesiune plenară 2*** **(Sala 2102)**
12:30 – 13:30 ***Pauză de masă*** **(Cafeteria ASE)**
13:30 – 14:00 ***Adunarea generală a SPSR*** **(Sala 2102)**
14:00 – 15:30 ***Sesiune plenară 3*** **(Sala 2102)**
15:30 – 15:45 ***Pauză de cafea***
15:45 – 17:10 ***Comunicări pe secţiuni*** **(săli 2013, 2102, 2416)**
17:10 – 17:30 ***Pauză de cafea***
17:30 – 19:00 ***Comunicări pe secţiuni*** **(săli 2013, 2102, 2416)**
19:00 – 21:00 ***Cină festivă*** **(Casa Universitarilor, str. Dionisie Lupu 46)**

Sâmbătă 14 aprilie

Academia de Studii Economice Bucureşti (Calea Dorobanţi 15–17)

9:00 – 11:00 ***Sesiune plenară 4*** **(Sala 2102)**
11:00 – 11:15 ***Pauză de cafea***
11:15 – 13:15 ***Comunicări pe secţiuni*** **(săli 2013, 2102)**

Programul comunicărilor – Vineri 13 aprilie

SESIUNE PLENARĂ 1 (Sala 2102)
Chair: Ciprian Tudor

9:05 – 9:50

Mădălina Deaconu (INRIA Nancy-Grand Est & Institut Élie Cartan de Lorraine)

Hitting times for stochastic processes - some new algorithms

9:50 – 10:35

Jean-Marc Bardet (SAMM, University Paris 1)

Asymptotic behavior of the Laplacian quasi-maximum likelihood estimator of affine causal processes

SESIUNE PLENARĂ 2 (Sala 2102)
Chair: Lucian Beznea

11:00 – 11:45

Dan Crişan (Imperial College London)

Solution properties of a 3D stochastic Euler fluid equation

11:45 – 12:30

Francesco Russo (ENSTA ParisTech)

BSDEs, martingale problems, associated deterministic equations and applications to finance

SESIUNE PLENARĂ 3 (Sala 2102)
Chair: Mădălina Deaconu

14:00 – 14:45
Alex Karagrigoriou (University of the Aegean, Samos, Greece)

Statistical Data Processing and Inference Based on Divergence Measures

14:45 – 15:30

Ali Suleyman Ustunel (Bilkent University, Turkey)

Ito Representation For the Functionals of Degenerate Diffusions

COMUNICĂRI PE SECŢIUNI

Secţiunea Probabilităţi şi Procese Stochastice (Sala 2102)
Chair: Francesco Russo

15:45 – 16:25
Florin Avram (Université de Pau, France)
First passage problems for Markov processes without positive jumps

16:25 – 16:40
Iulian Cîmpean (IMAR)
(Local) Quasimartingale functionals and their Doob-Meyer decompositions

16:40 – 16:55
Meryem Slaoui, Ciprian Tudor (University Lille 1)
Limit behavior of the Rosenblatt Ornstein-Uhlenbeck process with respect to the Hurst index

16:55 – 17:10
Dan Goreac, Claudia Grosu, Eduard Rotenstein (Université Paris-Est, LAMA (UMR 8050), UPEMLV, UPEC, CNRS, F-77454, Marne-la-Vallée, France; Alexandru Ioan Cuza University of Iaşi, FEAA; Alexandru Ioan Cuza University of Iaşi, Faculty of Mathematics)
Approximate and approximate null-controllability of a class of piecewise linear Markov switch system

Secţiunea Entropii, Divergenţe şi Selecţia Modelului cu Aplicaţii (Sala 2013)

Chair: Vlad Ştefan Barbu

15:45 – 16:25

Ionuţ Bebu, John M. Lachin (The Biostatistics Center, Department of Epidemiology and Biostatistics, The George Washington University, Rockville, USA)

Optimal screening schedules for disease progression with application to diabetic retinopathy

16:25 – 16:40

Christina Parpoula, Alex Karagrigoriou, Angeliki Lambrou (University of the Aegean, Samos; Hellenic Center for Disease Control and Prevention, Athens)

Model Selection in Time Series Studies of Influenza Morbidity

16:40 – 16:55

Emmanouil-Nektarios Kalligeris, Alex Karagrigoriou, Christina Parpoula (University of the Aegean, Samos)

On Mixed PARMA Modeling of Epidemic Activity in Biosurveillance Systems

16:55 – 17:10

Aida Toma (ASE, Bucharest & ISMMA)

Robust Estimations for the Single Index Model

Secţiunea Statistică
(Sala 2416)
Chair: Jean-Marc Bardet

15:45 – 16:10

Cristian Preda (University Lille 1)

Repeated functional data analysis

16:10 – 16:25

Ion Văduva (University of Bucharest)

On Simulation of Some Particular Discrete Distributions

16:25 – 16:40

Gheorghiţă Zbăganu (Institute of Mathematical Statistics and Applied Mathematics)

Indices of inequality

16:40 – 16:55

Cornelia Enăchescu, Denis Enăchescu (Institute of Mathematical Statistics and Applied Mathematics)

Learning Efficient Bayesian Network for Classification

16:55 – 17:10

Romică Trandafir, Vasile Preda, Ion Mierluş-Mazilu, Sorin Demetriu (Technical University of Civil Engineering Bucharest; University of Bucharest)

Bayesian statistical inference for a more general beta distribution class

Secţiunea Probabilităţi şi Procese Stochastice (Sala 2102)
Chair: Florin Avram

17:30 – 17:45

Romeo Negrea (Universitatea Politehnică Timişoara)
On a class of Stochastic Delay Differential Equations

17:45 – 18:00
Bogdan Gh. Munteanu (”Henri Coandă” Air Force Academy of Braşov)
The Rayleigh's family of distributions

18:00 – 18:15

Marwa Khalil, Ciprian Tudor (University Lille 1)
On the spatial variation for the solution to the stochastic wave equation driven by fractional noise

18:15 – 18:30

Alexei Leahu (Universitatea Tehnică a Moldovei)

Asupra unor modele probabiliste în fiabilitatea reţelelor

18:30 – 18:45

Daniel Ciuiu (Technical University of Civil Engineering Bucharest)
Stationary Time Series and Auto-copula

18:45 – 19:00
Udrea Păun (Romanian Academy)
A property of probability distribution of a random vector with independent components

Secţiunea Entropii, Divergenţe şi Selecţia Modelului cu Aplicaţii (Sala 2013)
Chair: Vlad Ştefan Barbu

17:30 – 17:45

Irina Adriana Băncescu, Vasile Preda (University of Bucharest and National Institute for Economic Research "Costin C. Kiriţescu"; University of Bucharest and ISMMA Gh. Mihoc – C. Iacob, Bucharest)
Modelling city size using q-Tsallis distributions

17:45 – 18:00

Ioana Dănilă (University of Bucharest, Doctoral School of Mathematics)
New results on cumulative entropies

18:00 – 18:15

Aurelia Căşaru (University of Bucharest, Doctoral School of Mathematics)
Lindley type distributions and Tsallis statistics

18:15 – 18:30

Maria Miroiu, Costel Bălcău, Doru Constantin (University of Piteşti)
An Extension with Three Parameters of Burr XII Distribution

18:30 – 18:45

Irina Adriana Băncescu, Luminiţa Chivu, Vasile Preda (University of Bucharest and National Institute for Economic Research "Costin C. Kiriţescu"; National Institute for Economic Research "Costin C. Kiriţescu"; University of Bucharest and ISMMA Gh. Mihoc – C. Iacob, Bucharest)
Wage segregation in Romania

Secţiunea Statistică (Sala 2416)
Chair: Cristian Preda

17:30 – 17:45
Luiza Bădin (ASE, Bucharest & ISMMA)
Conditional Efficiency Analysis: Recent Methodological Developments and Practical Implementation

17:45 – 18:00

Manuela Ghica (Universitatea de Medicină şi Farmacie "Carol Davila", Facultatea de Farmacie)
Confidence intervals for establish bioequivalence using bootstrap approach

18:00 – 18:15

Sorina Gramatovici, Corina Mortici (Bucharest University of Economic Studies)
Random Walk Hypothesis on Bucharest Stock Exchange

18:15 – 18:30

Carmina Georgescu, Emil Simion (University Politehnica of Bucharest)
Improvements of NIST statistical tests and applications to Cryptology

18:30 – 18:45

Romică Trandafir, Vasile Preda, Sorin Demetriu, Ion Mierluş-Mazilu (Technical University of Civil Engineering Bucharest; University of Bucharest)

On mixing of continuous distributions with discrete distributions used in reliability

18:45-19:00

Tatiana Paşa (State University of Moldova, Chişinău)

Implementation of the genetic algorithm for solving the non-linear transport problem

Programul comunicărilor – Sâmbătă 14 aprilie

SESIUNE PLENARĂ 4 (Sala 2102)

Chair: Ciprian Tudor

9:00 – 9:40
Marianne Clausel (Universite de Lorraine, France)
Anisotropic random fields: main properties and numerical simulation

9:40 – 10:20
Ionel Popescu (FMI/IMAR, Romania and Georgia Tech, US)
Recovery of spectrum for covariance matrix

10:20 – 11:00
Vincent Vandewalle, Matthieu Marbac (Université de Lille 2, France and INRIA; CREST and Ensai)

A tractable Multi-Partitions Clustering

Secţiunea Modelare Statistică cu Aplicaţii (sala 2102)
Chair: Alex Karagrigoriou

11:15 – 11:30
Despina Skilogianni, Alex Karagrigoriou, Georgios–Jason Siouris (University of the Aegean, Samos)
The Forecasting Ability under PVaR

11:30 – 11:45
Georgios–Jason Siouris, Alex Karagrigoriou, Despina Skilogianni (University of the Aegean, Samos)
Expected Percentage Shortfall and Adjusted Evaluation Measures

11:45 – 12:00
Bogdan Corneliu Biolan (University of Bucharest)
A comparison between detrending methods: Hodrick-Prescott filter, Baxter-King filter, Christiano-Fitzgerald filter

12:00 – 12:15
Ion Chiţescu, Vasile Preda, Răzvan Sfetcu (University of Bucharest; University of Bucharest and ISMMA Gh. Mihoc–C. Iacob, Bucharest; University of Bucharest)
Best Approximation of Convex Sets

12:15 – 12:30
Alex Karagrigoriou, Andreas Makrides, Ilia Vonta (University of the Aegean, Samos; University of Rouen, France; National Technical University of Athens)
A New Control Chart for not Necessarily Symmetric Distributions

12:30 – 13:00
Vlad Ştefan Barbu, Guglielmo D'Amico, Raimondo Manca, Filippo Petroni (University of Rouen; University "G. d'Annunzio" di Chieti-Pescara; University of Rome "La Sapienza"; University of Cagliari)
Step semi-Markov processes: modeling and application to manpower management

Optimizări şi Actuariat (Sala 2013)
Chair: Vasile Preda

11:15-11:45
Petar Jevtic, Minsuk Kwak, Traian Adrian Pîrvu (McMaster University, Canada; Hankuk University of Foreign Studies, South Korea; McMaster University, Canada
Longevity bond pricing in equilibrium

11:45-12:00
Ioan M. Stancu-Minasian, Andreea Mădălina Rusu-Stancu (ISMMA)

On semi-infinite programming problem under higher-order convexity

12:00-12:15
Raluca Vernic (Ovidius University of Constanta and ISMMA)

On the evaluation of some multivariate compound distributions with Sarmanov counting distribution

12:15-12:30
Marius Rădulescu, Constanţa Zoie Rădulescu (Institute of Mathematical Statistics and Applied Mathematics; National Institute for Research and Development in Informatics)

Single period portfolio selection models with transaction costs and initial holdings

12:30-12:45
Iuliana Iatan, Stefan Giebel (Department of Mathematics and Computer Science, Technical University of Civil Engineering Bucharest; Institut für Psychologie, Technical University of Braunschweig)

A New Representation for the Fuzzy Systems

12:45-13:00
Sezen Mutali (Ovidius University Constanţa)
A review of the fuzzy AHP approach to risk modeling

13:00-13:15
Florentin Şerban (Bucharest University of Economic Studies; University of Bucharest, Doctoral School of Mathematics)
Portfolio optimization in return-risk-liquidity framework