The 23rd Conference of the Romanian Society of Probability and Statistics

Bucharest, November 18-19, 2022

Program

Friday, November 18, 2022

“Miron Nicolescu” Amphitheater, ground floor
Chair: Ciprian Tudor
9:00 – 9:40 **Viorel Barbu** (Romanian Academy)
Uniqueness for nonlinear Fokker-Planck equations and for McKeanVlasov SDEs
9:45 – 10:25 **Radu Craiu** (University of Toronto)
Approximate Computation for Approximate Bayesian Methods

Coffee break

Chair: Viorel Barbu
10:45 – 11:25 **Wilhelm Stannat** (TU Berlin)
Two results on the optimal control for stochastic partial differential equations (SPDE)
11:30 – 12:10 **Valentin Patilea** (CREST Ensai, Rennes)
Some new developments in functional data analysis
12:15 – 12:55 **Max von Renesse** (Leipzig University)
Spectral Gap Estimates for Brownian motion with sticky reflecting boundary diffusion

Lunch

Probability session, “Miron Nicolescu” Amphitheater, ground floor
Chair: Wilhelm Stannat
15:05 – 15:45 **Madalina Deaconu** (Inria Nancy - Grand Est & IECL)
An excursion through the probabilistic representations of the fragmentation equation
15:50 – 16:30 **Solesne Bourguin** (Boston University)
Quantitative fluctuation analysis of multiscale dynamical systems

Statistics session, “Ciprian Foiaș” Hall, 8th floor
Chair: Radu Craiu
15:05 – 15:45 **Eugen Pircalabelu** (University of Louvain)
Unbalanced distributed estimation and inference for Gaussian graphical models
15:50 – 16:30 **Cedric Heuchenne** (University of Liege)
Statistical matching and WGAN generation for administrative data

Coffee break

Special Session "Stochastic Dynamics", "Miron Nicolescu" Amphitheater, ground floor
Chair: Lucian Beznea
16:50 – 17:20 **Karen Habermann** (University of Warwick)
A polynomial expansion for Brownian motion and the associated fluctuation process
17:25 – 17:55 **Ionuț Munteanu** (Al. I. Cuza University of Iassy)
Well-posedness for the Cahn-Hilliard-Navier-Stokes equations driven by gradient type noise
18:00 – 18:30 **Diana Conache** (TU Munich)
A variational condition for uniqueness of Doeblin measures

Special Session "Statistical Topics for Markov and semi-Markov processes: Methods and Applications", "Ciprian Foiaș" Hall, 8th floor
Chair: Vlad Stefan Barbu
16:50 – 17:10 **Andreas Makrides** (University of the Aegean)
A continuous-time stepwise transitions semi-Markov system
17:15 – 17:35 **Thomas Gkelsinis** (University of Rouen-Normandy)
Statistical inference for general order Markov chains based on weighted divergence measures
17:40 – 18:00 **Vlad Barbu** (University of Rouen-Normandy)
smmR: an R package for Simulation, Estimation and Reliability of Semi-Markov Models
18:05 – 18:25 **Ioannis Mavrogiannis** (University of Rouen-Normandy)
Drifting Semi-Markov Models: Estimation and Simulation through the dsmmR package

Saturday, November 19, 2022

"Miron Nicolescu" Amphitheater, ground floor
Chair: Lucian Beznea
9:00 – 9:40 **Martin Grothaus** (Technical University Kaiserslautern)
Hypocoercivity for non-linear infinite-dimensional degenerate stochastic differential equations
9:45 – 10:25 **Alex Karagrigoriou** (University of the Aegean)
Explaining Artificial Intelligence: On the Identification of Influential Features & Points

Coffee break

Probability Session, "Miron Nicolescu" Amphitheater, ground floor
Chair: Martin Grothaus
10:45 – 11:25 **Ashkan Nikeghbali** (University of Zürich)
Higher order Poisson approximations
11:30 – 12:10 **Emmanuel Lepinette** (Paris-Dauphine University)
Dynamic programming principle and computable prices in financial market models with transaction costs

Statistics Session, "Ciprian Foiaș" Hall, 8th floor
Chair: Valentin Patilea
10:45 – 11:25 **Mitra Fouladirad** (Ecole Centrale Marseille)
Model selection for wind data in the frame work of wind turbine reliability analysis
11:30 – 12:10 **Ionuț Bebu** (The George Washington University)
Personalized Screening Schedules for Chronic Diseases

Special Session “Stochastic Dynamics”, “Miron Nicolescu” Amphitheater, ground floor
Chair: Lucian Beznea
12:15 – 12:45 **Oana Lang** (Imperial College London)
On local and global solutions for a class of stochastic shallow water models
12:50 – 13:15 **Benedikt Eisenhuth** (Technical University Kaiserslautern)
Hypocoercivity for second order in time Reaction-Diffusion and Cahn-Hilliard type equations with multiplicative noise
13:20 – 13:35 **Adela Popescu** (Simion Stoilow Institute of Mathematics of the Romanian Academy)
Pure branching and total mass processes

Contributed Talks, “Ciprian Foiaș” Hall, 8th floor
Chair: Ionuț Bebu
12:15 – 12:30 **Mihaela Pricop-Jeckstadt** (University POLITEHNICA of Bucharest)
Minimax rates of convergence for statistical inverse problems based on discretely sampled functional data
12:35 – 12:50 **Florentina Suter** (University of Bucharest and Gheorghe Mihoc – Caius Iacob Institute of Mathematical Statistics and Applied Mathematics of the Romanian Academy)
Some stochastic orders between the concomitants of order statistics
12:55 – 13:10 **Christina Parpoula** (Panteion University of Social and Political Sciences)
Change-point analysis for Public Health surveillance and decision-making
13:15 – 13:30 **Petre Caraiani** (Bucharest University of Economic Studies)
Do Monetary Policy Shocks Impact the Network Structure of Financial Markets?

Lunch

Special Session “Stochastic Dynamics”, “Miron Nicolescu” Amphitheater, ground floor
Chair: Lucian Beznea
14:30 – 14:45 **Alexandra Andriciuc** (University of Bucharest and Simion Stoilow Institute of Mathematics of the Romanian Academy)
The PSO algorithm – a particular version
14:50 – 15:05 **Alexandru Mustățea** (Simion Stoilow Institute of Mathematics of the Romanian Academy)
Stochastic integration from a functional-analytic point of view
15:10 – 15:25 **Marian Petrică** (University of Bucharest and Gheorghe Mihoc – Caius Iacob Institute of Mathematical Statistics and Applied Mathematics of the Romanian Academy)
A modified SIRD model for Covid19 spread prediction using ensemble neural networks
15:30 – 15:45 **Alexandra Teodor** (University POLITEHNICA of Bucharest and Simion Stoilow Institute of Mathematics of the Romanian Academy)
The stochastic solution to a nonlinear Dirichlet problem with discontinuous boundary data

Contributed Talks, “Ciprian Foiaș” Hall, 8th floor
Chair: Aida Toma
14:30 – 14:45 **Silvia Dedu** (University of Economic Studies, Bucharest)
Loss models involving truncated and censored random variables
14:50 – 15:05 **Răzvan-Cornel Sfetcu** (University of Bucharest)
Order results for Awad-Varma entropy
15:10 – 15:25 **Alexandru Agapie** (University of Economic Studies, Bucharest, and Gheorghe Mihoc – Caius Iacob Institute of Mathematical Statistics and Applied Mathematics of the Romanian Academy)
Convergence of evolution strategies
15:30 – 15:45 **Bogdan Ichim** (University of Bucharest and Simion Stoilow Institute of Mathematics of the Romanian Academy)
Computations of probabilities in five candidates elections

Coffee break

Contributed Talks, "Miron Nicolescu" Amphitheater, ground floor
Chair: Iulian Câmpean
16:05 – 16:20 **Adina Oprişan** (New Mexico State University)
Large deviations via almost sure central limit theorems
16:25 – 16:40 **Julie Gamain** (University of Lille)
Exact variation and drift parameter estimation for the nonlinear fractional stochastic heat equation
16:45 – 17:00 **Dragoş-Pătru Covei** (University of Economic Studies, Bucharest)
Some results about a stochastic production planning
17:05 – 17:20 **Anişoara Maria Răducanu** (University of Economic Studies, Bucharest, and Gheorghe Mihoc – Caius Iacob Institute of Mathematical Statistics and Applied Mathematics of the Romanian Academy)
On the existence of a leader in a random set
17:25 – 17:40 **Ioana – Antonia Ţacă** (Transilvania University of Braşov)
A new partial ordering of sequences of real numbers and applications
17:45 – 18:00 **Alexandra Diana Meleşteu** (Transilvania University of Braşov)
Convex ordering of Polya random variables and approximation monotonicity of Bernstein-Stancu operators

Contributed Talks, "Ciprian Foiaş" Hall, 8th floor
Chair: Luiza Bădin
16:05 – 16:20 **Marius Rădulescu** (Gheorghe Mihoc – Caius Iacob Institute of Mathematical Statistics and Applied Mathematics of the Romanian Academy)
Convexity Properties of the Multivariate Monomial
16:25 – 16:40 **Ioan Stancu-Minasian** (Gheorghe Mihoc – Caius Iacob Institute of Mathematical Statistics and Applied Mathematics of the Romanian Academy)
Wolfe and Mond-Weir duality for multiobjective programming problems involving higher-order invex functions
16:45 – 17:00 **Maria Alexandra Badea** (Universitatea Ovidius, Constanţa)
On bivariate composite distributions: the Gumbel-Pareto distribution
17:05 – 17:20 **Daniel Ciuiu** (University of Civil Engineering Bucharest)
Cyclic partial autocorrelation function and applications to classical and hierarchical SARMA time series models
17:25 – 17:40 **Tatiana Paşa** (University of Moldova)
Genetic algorithms for solving non-linear transportation problems on large-scale networks
17:45 – 18:00 **Bogdan Gheorghe Munteanu** (Henri Coanda Air Force Academy)
Analysis of combat dynamics by means of Markov chains