PROGRAM, 16–21.01.2017

Monday, 16.01

9:00-12:00 SPECIAL SESSION FOR YOUNG RESEARCHERS (COULD BE POSTPONED THE AFTERNOON AS A PARALLEL SESSION IF ENOUGH SNOW TO SKI)

- **9:00-9:15** Sara Svaluto-Ferro: Boundary attainment for polynomial jump-diffusions on the unit interval
- **9:15-9:30** Sahar Albosaily: The optimal investment and consumption for the financial market generated by the spread of risky assets
- **9:30-9:45** Belak Christoph: Portfolio optimization with constant and proportional costs
- **9:45-10:00** Calypso Herrera: Parallel American Monte Carlo
- **10:00-10:15** Côme Huré: Algorithmic trading in a microstructural limit order book model
- break
- **10:45-11:00** Asgar Jamneshan: Duality results for vector-valued risk measures
- **11:00-11:15** Tongseok Lim: Optimal transport in general dimensions with various additional constraints
- **11:15-11:30** Peng Luo: Solvability of multidimensional quadratic BS-DEs
- **11:30-11:45** Shohruh Miryusupov: Particle Monte-Carlo simulation: improvements using Hamiltonian dynamics
- **11:45-12:00** Matteo Basei: Coordination of centralized and distributed generation
- **Lunch**

MAIN SESSION

- **14.00-14.45** Tom Hurd: Symmetric cascades in banking networks
- **14.45-15.15** Tuan Tran: Asset fire sales and strategic trading by regulated banks
- **15.15-15.45** Anatoly Peresetsky: Russian bank credit ratings and bank license withdrawal 2012-2016
- **15.45-16.15** Hye-Jin Cho : Economics of regulation: credit rationing and excess liquidity
- Coffee break
- **16.45-17.15** Bruno Bouchard: Stochastic invariance of closed sets and applications in finance
- **17.15-17.30** Wissal Sabbagh: Weak BSDEs with American type constraint
- Break
- **17:45-18:15** Eugene Feinberg : Jump Markov processes and Kolmogorov's equations
- **18:15-18:45** Mathieu Rosembaum: Pricing and hedging under rough Heston models

Tuesday, 17.01

9:00-12:00 SPECIAL SESSION FOR YOUNG RESEARCHERS (COULD BE POSTPONED THE AFTERNOON AS A PARALLEL SESSION IF ENOUGH SNOW TO SKI)

- **09:00-09:15** Blanchard Romain: Robust optimal investment in discrete time for unbounded utility function
- **09:15-09:30** Thomas Cayé: Trading with small nonlinear price impact
- **09:30-09:45** Lucas Gonon: Filtering of affine processes with Riccati equations
- **09:45-10:00** Antoine Kornprobs: Winning investment strategies based on financial crisis indicators
- **10:00-10:15** Miryana Grigorova : Doubly reflected BSDEs and Dynkin games: beyond the right-continuous case
- break
- **10:45-11:15** Matteo Burzoni: Pathwise arbitrage theory in discrete time
- **11:15-11:30** David Proemel A superhedging approach to stochastic integration
- **11:30-11:45** Max Reppen: Optimal investment and consumption with fixed and proportional transaction costs
- **11:45-12:00** Alexandra Tsimbalyuk: Perpetuities and time-reversal
- **Lunch**

  MAIN SESSION

- **14:00-14:30** Stéphane Crépey : XVA analysis from the balance sheet
- **14:30-15:00** Tatiana Belkina: Asymptotic investment behaviors under insurance risk processes

- **15:00-15:30** Thai Nguyen: Optimal investment under VaR-regulation for life insurance contracts with guarantees
- **15:30-16:00** Yuri Kabanov: The ruin problem for Lévy-driven linear stochastic equations with applications to actuarial models with negative risk sums
- Coffee break
- **16:30-17:00** Anis Matoussi : Second-order reflected BSDEs and applications for robust control
- **17:00-17:45** Kostas Kardaras: Infinite-dimensional stochastic integration under structural conditions
- Break
- **18:00-18:30** Kathrin Glau: Magic points for finance and stochastics
- **18:30-19:00** Doncho Donchev: Brownian motion exit densities for general one-sided boundaries

Wednesday, 18.01

MAIN SESSION

- **9:00-11:00** Uwe Franz: An invitation to noncommutative probability and quantum stochastic calculus. Lecture I.
- **11:15-12:00** Tahir Choulli: Explicit parametrisation for local martingale deflators for models stopped at the death time.
- **Dinner**
- **14:00-14:45** Huyên Pham: Robust Markowitz portfolio selection under ambiguous volatility and correlation
- **14:45-15:15** Ludger Ruschendorf : On the construction of optimal portfolios and payoffs
- **15:15-15:45** Miklos Rasonyi: Model-independent portfolio optimization
- **15:45-16:15** Laurence Carassus: Robust optimal investments in discrete time for unbounded utility function
- **16:15-16:30** Ngoc Huy Chau: On optimal investment with processes of long or negative memory
- Coffee break
- **17:00-17:30** Albina Danilova : Equilibrium with imbalance of the derivative market
- **17.30-17:45** Arnaud Lionnet: Equilibrium pricing of external risk in a system of agents with relative performance concerns
- Break
- **18:00-18:30** Keita Owari: On convex functions on the duals of Δ_2-Orlicz spaces
- **18:30-19:00** Dirk Becherer: Hedging, liquidation and stability under transient price impact

Thursday, 19.01

MAIN SESSION

- **9:00-11:00** Uwe Franz: An invitation to noncommutative probability and quantum stochastic calculus. Lecture II.
- **11:15-12:00** Nino Kordzakhia: A comparative study on boundary crossing probabilities for Gaussian-Markov processes
- **Lunch**
- **14:00-14:45** Ilya Molchanov: Risk arbitrage and hedging to acceptability
- **14:45-15:15** Cody Hyndman: A geometric approach to arbitrage-free modelling, estimation, and prediction
- **15.15-15.45** Dominique Guegan: Several approaches for spatial Value-at-Risk: the Kendall VaR and the spectrum VaR
- **15:45-16:00** Rostislav Berezovsky: Set-valued risk measures in non-conical case
- Coffee break
- **16:30-17:00** Yana Belopolskaya: Probabilistic interpretations of the Cauchy problem solutions for systems of nonlinear parabolic equation
- **17:00-17:30** Maria do Rosário Grossinho: Pricing American style perpetual put options through transformation into nonlinear stationary Black-Scholes equations
- Break
- **17:45-18:15** Ernst Eberlein: Multiple curve interest rate modelling with negative rates
- **18:15-18:45** Thorsten Schmidt: Towards general term structure models

- **18:45-19:15** Rama Cont: Stochastic calculus without probability: pathwise integration and calculus for functional of paths of finite quadratic variation

Friday, 20.01

MAIN SESSION

- **9:00-9:30** Isaac Sonin: Elimination-insertion in Markov Chains and their applications
- **9:30-10:00** Elena Yarovaya: Branching random walks and Brownian motion
- break
- **10:15-10:45** Ernst Presman : Some remarks on general one-dimensional diffusion
- **10:45-11:15** Eugene Burnaev: Online conformalized density and distance-based anomaly detection in time-series data
- break
- **11:30-12:00** Gennady Martynov: Anderson-Darling and Cramér-von Mises statistics
- **Dinner**
- **14:00-14:45** Matheus Grasselli: Macroeconomic modelling with heterogeneous agents: the master equation approach
- **14:45-15:15** Christa Cuchiero: Cover's portfolio, stochastic portfolio theory and the numeraire portfolio
- **15:15-15:45** Paolo Guasoni: Leveraged funds: robust replication and performance evaluation
- **15:45-16:15** Mikhail Nechaev: Commodities risk-management and CCP
- Coffee break
- **16:45-17:15** Igor Pavlov: Martingales on deformed stochastic bases: from discrete to continuous time

- **17:15-17:45** Elena Boguslavskaya: Appell integral transforms and fractional polynomials
- Break
- **17.45-18.15** Monique Jeanblanc: Predictable representation property in enlarged filtration
- **18:15-18:45** Josef Teichmann: Bayesian Finance
- **18:45-19:15** Alexander Gushchin : Joint law of the terminal values of a nonnegative submartingale and its compensator