# PROGRAM, 13-19.01.2014

#### Monday, 13.01

- **8.45-9.00** *In memoriam* of Marc Yor (July 24, 1949 January 10, 2014).
- 9.00-9.45 Eberlein E. Lévy driven two price valuation with applications to long-dated contracts.
- 9.45-10.15 Shiryaev A. Jump processes: compensators and the Kolmogorov equations.
- 10.15-10.45 Pavlov I. Theorems on deformed martingales and their application to financial mathematics.
- Coffee break
- 11.05-11.35 Belomestry D. Optimal stopping under model uncertainty: randomized stopping times approach.
- 11.35.-12.00 Lyulko Y. Maximal inequalities for skew Brownian motion and related optimal stopping problems.
- 12.05-12.30 Muravlev A. Quickest disorder detection problem with sequential hypothesis testing.
- 14.00-14.45 Choulli T. Hellinger process for supermartingale deflators with application in utility maximization.
- 14.45-15.15 Engelbert H.J. On the predictable representation property of certain families of square integrable martingales.
- 15.15-15.45 Di Tella P. Representation of martingales of the natural filtration of a Lévy process.
- 15.45-16.15 Galtchouk L. On martingales of independent increments processes.
- Coffee break

- 16.45-17.10 Herdegen M. A class of strict local martingales.
- 17.10-17.35 Herrmann S. Optimal investment in a Black-Scholes model with a bubble.
- 17.35-18.00 Kallblad S. Ambiguity averse portfolio optimization with quasiconcave utility functionals.
- Coffee break
- 18.15-18.40 Palamarchuk E. Long-term impacts of average optimal policies in linear control systems under general time preference.
- 18.40-19.05 Pergamenchtchikov S. Optimal investment with bounded VaR for power utility functions.
- 19.05-19.30

# Tuesday, 14.01

- 9.00-9.45 Ortega J.-P. Option pricing and hedging with heteroscedastic underlying price processes. Discrete and continuous time approaches.
- 9.45-10.15 Guegan D. A quantitative finance and actuarial framework for risk management.
- 10.15-10.45 Schmutz M. Risk based solvency frameworks and resulting modeling challenges.
- Coffee break
- 11.05-11.35 Grigoryeva L. Estimation and empirical performance of non-scalar dynamic conditional correlation (DCC) models.
- 11.35.-12.00 Peresetsky A. Extracting global stochastic trend from non-synchronous data.
- 12.05-12.30 Fukasawa M. Whittle likelihood for high frequency data.

- 14.00-14.45 Platen E. The affine nature of aggregate wealth dynamics.
- 14.45-15.15 Elie R.
- 15.15-15.45 Maliutov M. Time series homogeneity test via VLMC training.
- 15.45-16.15 Kleptsyna M. Mixed fractional Brownian motion: the filtering perspective.
- Coffee break
- 16.45-17.10 Gushchin A. A characterization of minimax tests with applications to efficient partial hedging.
- 17.10-17.35 Burnaev E. Monitoring of financial indexes volatility based on the Haar approximation.
- 17.35-18.00 Martynov G. Gaussianity test for random processes.
- Coffee break
- 18.15-18.40 Vaicenavicius J. Bayesian sequential testing of the sign of a drift.
- 18.40-19.05 Novikov A., Kordzahia N. Lower and upper bounds for options on VWAP.
- 19.05-19.30 Sonin I. Insertion a new operation for Markov chains.

# Wednesday, 15.01

- 14.00-14.45 Teichmann J. An  $L^0$ -interpretation of Burkholder–Davis–Gundy inequalities and a proof alternative for the fundamental theorem of asset pricing.
- 14.45-15.15 Pham H. Randomization approach and backward SDE representation for optimal control of non-Markovian SDEs.

- 15.15-15.45 Matoussi A. Probabilistic representation for fully nonlinear SPDEs and 2BSDEs. .
- 15.45-16.15 Moreau L. Trading with price impact.
- Coffee break
- 16.45-17.10 Kruse T. Optimal stopping with private information.
- 17.10-17.35 Mastrolia T. Density analysis of BSDEs.
- 17.35-18.00
- Coffee break
- 18.15-18.40 Larsson M. Existence and uniqueness of polynomial preserving diffusions.
- **18.40-19.05** Pulido S. Approximation of polynomial processes with finite-state Markov processes.
- 19.05-19.30 Leniec M. Inverse first passage problem in credit risk.

# Thursday, 16.01

- 9.00-9.45 Grasselli M. The macroeconomic consequences of private debt.
- 9.45-10.15 Choi Youngna. Financial instability contagion: a dynamical system approach.
- 10.15-10.45 Amini H. Default cascade in financial networks.
- Coffee break
- 11.05-11.30 Minca A. Systemic risk with central counterparty clearing .
- 11.30.-12.00 Schweizer M. Some new ideas on bubbles.
- 12.05-12.30 Mezghani H. Maximization of recursive utilities under convex portfolio constraints.

- 14.00-14.45 Suzuki T. Optimal subsidy allocation to banks under financial crisis.
- 14.45-15.15 Royer G. General indifference pricing with small transaction costs.
- 15.15-15.45 Nguyen Huu Thai. Approximate hedging with proportional transaction costs for multi-asset options.
- 15.45-16.15 Grépat J. On convergence of hedging sets under small transaction costs.
- Coffee break
- 16.45-17.10 Runggaldier W. On multicurve models for the term structure.
- 17.10-17.35 Cuchiero C. An HJM approach for multiple yield curves.
- 17.35-18.00 Donchev. D. Brownian motion exit probabilities for two-side exotic boundaries.
- Coffee break
- 18.15-18.40 Horvath B. Sub-eigenfunctions for SABR and the generalized Feller property.
- 18.40-19.05 Abakirova A. On approximation of the BSDEs: large samples.
- **19.05-19.30** Crépey S. Gap risk modeling.

# Friday, 17.01

- 9.00-9.45 Touzi N. Path-dependent PDEs.
- 9.45-10.15 Vostrikova L. Pricing and hedging of exponential semimartingale models with random factors.
- 10.15-10.45 Danilova A. Understanding stochastic volatility in financial markets.

- Coffee break
- 11.05-11.35 Molchanov I. Risk measures in the multiasset setting.
- 11.35.-12.05 Douadi R. Procyclicality issues with Basel III regulatory framework.
- 14.00-14.45 Zervos M. A zero-sum game between a singular stochastic controller and a discretionary stopper.
- 14.45-15.15 Corcuera J.M. A continuous auction model with insiders and random time of information release.
- 15.15-15.45 Urusov M. Processes that can be embedded in a geometric Brownian motion.
- 15.45-16.15 Mishura Y. Two results of Marc Yor: review, simplifications, and generalizations.
- Coffee break
- 16.45-17.10 Sikic M. On no-arbitrage conditions and portfolio optimization in discrete time market models.
- 17.10-17.35 Kreinin A. On simulation of multivariate Poisson processes and their generalizations.
- 17.35-18.00
- Coffee break
- 18.15-18.40 Aksamit A. Optional semimartingale decomposition and no arbitrage condition in enlarge filtration.
- 18.40-19.05 Ellanskaya A. On some examples of the indifference pricing of exponential semimartingale models with random factor.
- 19.05-19.30

# Saturday, 18.01

- 9.00-9.45 Hinz J. Duality bounds for convex switching problems.
- 9.45-10.15
- 10.15-10.45 Aboura S. Are banks firms? The Modigliani-Miller theorem revisited.
- Coffee break
- 11.05-11.35 Owari K. On a convex duality method under model uncertainty.
- 11.35.-12.05 Zhitlukhin M. Testing hypotheses about the sign of the drift of a Brownian motion.
- 12.05-12.35 Lépinette E. TBA