

Innovative Research in Mathematical Finance, September 3-7 2018

Monday the third of September.

Lunch at 12:30.

- ▲ The break time between two talks includes questions; it may be reduced when possible.

Chairman: Martin Schweizer.

- 14:00-14:15 Opening session. **By Martin Schweizer.**
- 14:15-14:45 Beyond the Kabanov financial market model with proportional transaction costs. **By Emmanuel Lépinette.**
- 14:55-15:25 Joint distributions of terminal values of increasing processes and their compensators, single jump martingales and the Skorokhod embedding problem. **By Alexander Gushchin.**
- 15:35-16:05 Expected utility maximization under incomplete information and with Cox-Process observations. **By Wolfgang Runggaldier.**

Coffee break.

Chairman: E. Lépinette.

- 16:30-17:00 Samuelson revisited – a new FTAP without a fixed numeraire. **By Martin Schweizer.**
- 17:10-17:40 How martingales' space expands when its filtration is progressively enlarged? **By Tahir Choulli.**
- 17:50-18:20 On approximation of BSDE. **By Yuri Kutoyants.**

Dinner at 19:30.

Tuesday the fourth of September.

Chairman: Miryana Grigороva.

- 09:00-09:30 Approximation and calibration of laws of solutions to stochastic differential equations. **By Jocelyne Bion Nadal.**

09:40-10:10 Discounting invariant FTAP for large financial markets. **By Daniel Balint.**

Coffee break.

Chairman: Jocelyne Bion Nadal.

10:30-11:00 Quenched mass transport of particles towards a target. **By Idris Kharroubi.**

11:10-11:40 Optimal make take fees for market making regulation. **By Thibaut Mastrolia.**

11:50-12:20 Non-linear pricing of American options in an incomplete market with default. **By Miryana Grigороva.**

Lunch from 12:30 to 13:30.

Chairman: Cagin Ararat.

14:00-14:30 Robust utility maximization under transaction costs. **By Miklos Rasonyi.**

14:40-15:10 Markov chain approximation for irregular SDEs and continuous strong Markov processes. **By Mihail Urusov.**

15:20-15:50 Stochastic differential equations with singular perturbations. **By Serge Pergamenchtchikov.**

16:00-16:30 Dynamic Cournot-Nash equilibrium via causal optimal transport. **By Beatrice Acciaio.**

Coffee break.

Chairman: Beatrice Acciaio.

16:55-17:25 An optimal stopping mean-field game of resource sharing. **By Peter Tankov.**

17:35-18:05 Mean-field games with absorption. **By Luciano Campi.**

18:15-18:45 Computation of systemic risk measures. **By Cagin Ararat.**

Dinner at 19:30.

Wednesday the fifth of September.

Chairman: Landy Rabahasaina.

09:00-09:30 Set-valued risk measures in the non-convex setting. **By Ilya Molchanov.**

09:40-10:10 From multivariate quantiles to set-valued risk measures: A set optimization approach to financial models with frictions. **By Andreas Hamel.**

Coffee break.

Chairman: Andreas Hamel.

10:30-11:00 The universality problem in dynamic machine learning with applications to realized covolatilities forecasting. **By Juan-Pablo Ortega.**

11:10-11:40 Asymptotics for IBNR/infinite queue processes. **By Landy Rabahasaina.**

11:50-12:20 Fractional Poisson process and applications to actuarial sciences. **By Bruno Sausseureau.**

Lunch from 12:30 to 13:30.

13:30-18:30 Excursion: Bus departure at 13:45 exactly, so please be ready before.

19:30:– Either free dinner at the Cirm center or restaurant *Le bistrot de Lorette* for registered participants.

Thursday the sixth of September.

Chairman: Kostas Kardaras.

09:30-10:00 Pricing measures in the plural and their coherences issue. **By Shiqi Song.**

10:10-10:40 Pricing without martingale measure. **By Laurence Carassus.**

Coffee break.

Chairman: Laurence Carassus.

11:05-11:35 Efficient estimation of present-value distributions for long-dated contracts. **By Kostas Kardaras.**

11:45-12:15 On the singular control of exchange rates. **By Tiziano Vargiolu.**

Lunch from 12:30 to 13:30.

Chairman: Lioudmila Vostrikova.

- 14:00-14:30 Price dynamics and repeated games: the CMMV pricing model. **By Bernard De Meyer.**
- 14:40-15:10 Continuous time contract theory. **By Nizar Touzi.**
- 15:20-15:50 Options Portfolio Selection. **By Paolo Guasoni.**
- 16:00-16:30 Learning Rough Volatility. **By Blanka Horvath.**

Coffee break.

Chairman: Paolo Guasoni.

- 16:55-17:25 Exponential functionals of PII and mathematical finance. **By Lioudmila Vostrikova**
- 17:35-18:05 Bayesian finance. **By Joseph Teichmann.**
- 18:15-19:00 On a multi-asset version of the Kusuoka limit theorem of option super-replication under transaction costs. **By Yuri Kabanov.**

Gala dinner at 19:30.

Friday the seventh of September.

Chairman: Xiaolu Tan.

- 09:00-09:30 Risk aversion of insider and asymmetric information. **By Albina Danilova.**
- 09:40-10:10 Infinite dimensional polynomial processes. **By Christa Cuchiero.**

Coffee break.

Chairman: Christa Cuchiero.

- 10:30-11:00 Utility maximization with proportional transaction costs under model uncertainty. **By Xiaolu Tan.**
- 11:10-11:40 Hedging under small transaction costs. **By Masaaki Fukasawa.**
- 11:50-12:20 Limit Order Books:tractable SPDE models. **By Marvin Mueller.**

Lunch from 12:30 to 13:30.

Chairman: Hyejin Cho.

14:00-14:45 On the sequential testing of two statistical hypotheses. **By Albert Shiryaev.**

14:50-15:20 Lebesgue's convergence theorem and Fatou's lemma for varying probabilities **By Eugene Feinberg.**

15:30-16:00 A Boolean-valued models approach to random convex analysis and duality theory of conditional risk measures. **By José-Miguel Zapata.**

Coffee break.

Chairman: E. Lépinette.

16:25-16:55 Utility maximization in a multidimensional market with small nonlinear price impact. **By Thomas Cayé.**

17:05-17:35 Self-enforcing insurance arrangements. **By Mihail Zervos.**

17:45-18:15 Capital growth in financial markets with frictions. **By Esmail Babaei Khezerloo.**

18:25-19:00 On overconfidence, bubbles and the stochastic discount factor. **By Hyejin Cho.**

Dinner at 19:30.