
Stochastic Modeling and Control

May 8-13th, 2023

Programme

Monday, May 8th, 2023

10.00-10.10 **Opening**

10.10-10.40 **T. Choulli**, *The optimal stopping problem and Linear RBSDEs under random horizon*

10.45-11.15 **A. Jaśkiewicz**, *Time-consistency in the mean-variance problem: A new perspective*

11.45-12.15 **S. Christensen**, *Learning to reflect – Data-driven solutions to singular control problems*

12:25-12:55 **C. Cuchiero**, *Signature methods in stochastic portfolio theory*

15.00-15.30 **A. Rozkosz**, *Long-time asymptotics of the value function in non-linear stopping problems*

15.40-16:10 **T. Klimsiak**, *Nonlinear reflected BSDEs and their applications to Dynkin games: beyond the semimartingale framework*

16.20-16.50 **K. Szajowski**, *Multilateral decisions with stopping strategies*

17.00-17.30 **J. Zabczyk**, *Book presentations “Mathematics of the bond market” by M.Barski, J.Zabczyk and “Mathematical control theory”, 2nd edition, by J. Zabczyk*

Tuesday, May 9th, 2023

9.00-9.45 **G. Yin**, *A New Computational Approach for Filtering*

10.00-10.30 **R. Wunderlich**, *Stochastic Models and Optimal Control of Epidemics Under Partial Information*

10.40-11.10 **C. Ceci**, *Optimal reinsurance via BSDEs in a partially observable model with jump clusters*

11.45-12.15 **N. Bäuerle**, *Mean Field Markov Decision Processes*

12.25-12.55 **L. Campi**, *Correlated equilibria and mean field games*

15.00-15.30 **W. Runggaldier**, *On the Separation of Estimation and Control in Risk Sensitive Investment Problems under Incomplete Observation*

15.40-16.10 **M. Pitera**, *Discrete-time risk sensitive portfolio optimisation with proportional transaction costs*

16.20-16.50 **L. Stettner**, *Optimal certainty equivalent control of the average cost*

Wednesday, May 10th, 2023

9.00-9.45 **J. Obłój**, *Optimal Transport methods for calibration of pricing models in mathematical finance*

10.00-10.30 **J. Palczewski**, *Stopping games with asymmetric information*

10.40-11.10 **B. Maslowski**, *Stochastic equations driven by fractional processes in Banach spaces*

11.45-12.15 **S. Peszat**, *Heat equation with non-homogeneous Dirichlet white noise boundary conditions*

Thursday, May 11th, 2023

9.00-9.45 **H. Pham**, *Generative modeling for time series via Schrödinger bridge*

10.00-10.30 **T. De Angelis**, *A quickest detection problem with false negatives*

10.40-11.10 **J. Sass**, *Convergence of Optimal Strategies in a Multivariate Financial Market with Knightian Uncertainty on the Drift*

11.45-12.15 **M. Rásonyi**, *On the ergodic properties of certain stochastic models with memory*

12.25-12.55 **S. Desmettre**, *Equilibrium Investment with Random Risk Aversion*

15.00-15.30 **Y. Mishura**, *Standard and fractional Bessel and CIR processes*

15.40-16.10 **J. Kallsen**, *Should I invest in the market portfolio? - A parametric approach*

16.20-16.50 **Z. Palmowski**, *Cancellable American options under negative discounting*

17.00-17.30 **M. Barski**, *Affine processes driven by Lévy factors*

Friday, May 12th, 2023

9.00-9.45 **E. Bayraktar**, *Prediction problems and second order equations*

10.00-10.30 **T. Bielecki**, *Dynamic Robo-advising Using Model Predictive Control*

10.40-11.10 **Ł. Delong**, *Solving partial differential equations with neural networks with application to pricing of insurance claims*

11.45-12.15 **F. Dufour**, *Constrained nonzero-sum Markov games*

12.25-12.55 **J. Jakubowski**, *On bivariate distributions of local time of Itô-McKean diffusions*

15.00-15.30 **F. Gozzi**, *On Stochastic Control and (Mean Field) Games in Infinite Dimension*

15.40-16.10 **M. Wiśniewolski**, *On exponential functional of Brownian motion at a random time*

16.20-16.50 **S. Hamadene**, *Stochastic Impulse Control with Delay and Random Coefficients*

17.00-17.30 **D. Jelito**, *Impulse control with generalised discounting*

Saturday, May 13th, 2023

9.00-9.30 **I. Cialenco**, *Risk Filtering and Risk-Averse Control of Systems with Model Uncertainty*

9.40-10.20 **A. Rygiel**, *Hedging under volatility uncertainty and convex transaction costs*

10.30-11.00 **M. Niewęłowski**, *Multivariate Hawkes processes with graphs*

11.00-11.10 **Closing**