

# Program of International Conference “Advanced Finance and Stochastics”

All the talks will be held in the conference hall on the 9th floor of Steklov Institute.

## Monday, 24 June

- 8:40 – 9:10     **Registration**
- 9:10 – 9:30     **Opening**
- 9:30 – 10:20    M. Schweizer: *On a new stochastic Fubini theorem*
- 10:30 – 11:20   K. Kardaras: *Prior-to-default equivalent supermartingale measures*
- 11:30 – 11:50   D. Rokhlin: *On a generalized shadow price process in utility maximization problems under transaction costs*
- 11:50 – 12:10   **Coffee break**
- 12:10 – 13:00   A. Novikov: *Lower and upper bounds for Asian-type options: a unified approach*
- 13:10 – 13:30   S. Nadtochiy: *Weak reflection principle and static hedging of barrier options*
- 13:30 – 15:00   **Lunch**
- 15:00 – 15:50   T. Suzuki: *The pricing model of corporate securities under cross-holdings of debts*
- 16:00 – 16:20   T. Rheinländer: *Hedging of barrier options via a general self-duality*
- 16:20 – 16:40   **Coffee break**
- 16:40 – 17:30   D. Kramkov: *Existence of an endogenously complete equilibrium driven by a diffusion*
- 17:40 – 18:00   S. Khovansky: *What can be inferred from a single cross-section of stock returns?*
- 18:00 – 20:00   **Welcome reception**

## Tuesday, 25 June

- 9:30 – 10:20    M. Dempster: *Efficient calibration of a nonlinear long term yield curve model effective from low rate regimes*
- 10:30 – 11:20   E. Eberlein: *A theory of bid and ask prices in continuous time*
- 11:30 – 11:50   A. Cadenillas: *On the optimal debt ceiling*
- 11:50 – 12:10   **Coffee break**
- 12:10 – 13:00   M. Grossinho: *Approximation of nondivergent type parabolic PDEs in finance*
- 13:10 – 13:30   D. Rheinländer: *Pricing and hedging variance swaps on a swap rate*
- 13:30 – 15:00   **Lunch**
- 15:00 – 15:50   M. Kijima: *Investment and capital structure decisions under time-inconsistent preferences*
- 16:00 – 16:20   S. Gerhold: *Local volatility models: approximation and regularization*
- 16:20 – 16:40   **Coffee break**
- 16:40 – 17:00   E. Shamarova: *Portfolio selection and an analog of the Black–Scholes PDE in a Lévy-type market*
- 17:00 – 17:20   M. Anthropelos: *An equilibrium model for commodity forward prices*
- 17:20 – 17:40   G. Martynov: *Cramér–von Mises test for Gauss processes*
- 17:40 – 18:00   V. Panov: *Exponential functionals of Lévy processes*

## Wednesday, 26 June

- 9:30 – 10:20    M. Soner: *Martingale optimal transport and robust hedging*
- 10:30 – 11:20   B. Dupire: *Functional Ito calculus and financial applications*
- 11:30 – 12:20   D. Belomestny: *Optimal stopping via multilevel Monte Carlo*
- 12:30 – 14:00   **Lunch**

## Thursday, 27 June

- 9:30 – 10:20 W. T. Ziemba: *Response to Paul A. Samuelson letters and papers on the Kelly capital growth investment criterion*
- 10:30 – 11:20 L. Vostrikova: *Semimartingale models with additional information and their application in mathematical finance*
- 11:30 – 11:50 R. Ahlip: *Pricing foreign currency options under jumps diffusions and stochastic interest rates*
- 11:50 – 12:10 **Coffee break**
- 12:10 – 12:40 **Poster session**
- 12:40 – 13:30 J. Hinz: *Using convexity methods for optimal stochastic switching*
- 13:30 – 15:00 **Lunch**
- 15:00 – 15:50 Yu. Kabanov: *On essential supremum and essential maximum with respect to random partial orders with applications to hedging of contingent claims under transaction costs*
- 16:00 – 16:20 A. Slastnikov: *Optimization of credit policy of bank and the government guarantees in a model of investment in a risky project*
- 16:20 – 16:40 **Coffee break**
- 16:40 – 17:30 P. Glasserman: *Market-triggered changes in capital structure: equilibrium price dynamics*
- 17:40 – 18:00 S. Sidorov: *GARCH Model with jumps augmented with news analytics data*
- 18:00 – 18:20 H. Amini: *Systemic risk with central counterparty clearing*

## Friday, 28 June

- 9:30 – 10:20 M. Markov: *Dynamic analysis of hedge fund returns: detecting leverage and fraud*
- 10:30 – 11:20 E. Mordecki: *Optimal stopping: representation theorems and new examples*
- 11:30 – 11:50 C. Cuchiero: *Fourier transform methods for pathwise covariance estimation in the presence of jumps*
- 11:50 – 12:10 **Coffee break**
- 12:10 – 12:30 A. Ahmad: *Option pricing via stochastic volatility models: impact of correlation structure on option prices*
- 12:30 – 12:50 A. Gushchin: *On a connection between superhedging prices and the dual problem in utility maximization*
- 12:50 – 13:10 A. Muravlev: *Sequential hypothesis testing for a drift of a fractional Brownian motion*
- 13:10 – 13:30 M. Zhitlukhin: *Detection of trend changes in stock prices*
- 13:30 – 15:00 **Lunch**
- 15:00 – 15:20 F. Guillame: *A moment matching market implied calibration*
- 15:20 – 15:40 Ö. Önalán: *Subdiffusive Ornstein–Uhlenbeck processes and applications to finance*
- 15:40 – 16:00 T. Vasilieva: *American put option valuation by means of Mellin transforms*
- 16:00 – 16:20 **Coffee break**
- 16:20 – 16:40 A. Makarenko: *Symbolic CTQ-analysis – a new method for studying of financial indicators*
- 16:40 – 17:00 D. Muravey: *The value of Asian options in the Black–Scholes model: PDE approach*
- 17:00 – 17:10 **Closing**
- 17:10 – 19:00 **Farewell drinks**