**Preliminary schedule as of 20.03.2015**

**Day 1. Arrival/Analytics. 23.03.2015, Building ZIV, Room 0.02**

 **(Theodor-Körner-Allee 8, 02763 Zittau)**

9.00 – Steam-train trip to Oybin castle. 2 hour hike. For the participants arriving on the 22nd of March.

11:30 – registration.

12:30 – Lunch (Mensa, Hochwaldstr. 12, 02763 Zittau)

13:30 – Opening of the conference.

13:30 – L. A. Bordag. Optimization problem for a portfolio with an illiquid asset: Lie group analysis

14:15 – M. V. Babich. Lie algebras of the complex classical groups and birational Darboux coordinates on their coadjoint orbits.

15:00 – I. Kossaczky. Hamilton-Jacobi-Bellman equation

15:30 – Coffee.

16:00 – D. Puzyrev. Delay-differential equations and large delay approximation

16:30 – T. A. Vasileva Valuation of Asia options by implicit difference method

 16.50 – J. E. Podschipkova. Model of optimal flood hydrograph social natural management of system "Volga Hydroelectric Power Station - Volga-Akhtuba floodplain".

17:10 – N. Antonyan. Mechanisms of hydrological risk control at the Volga-Akhtuba floodplain

17:30 – End on the first day.

**Day 2. Stochastic. 24.03.2015, Building ZII, Room 209**

 **(Schliebenstraße 21. 02763 Zittau)**

9:30 – Maria do R. Grossinho. Existence results for Nonlinear PDEs arising in Financial Modelling

10.00 - O. Kydryavtsev. Efficient pricing options under Levy processes: a numerical Wiener-Hopf factorization method.

10:30 – J. Lueddeckens. Parameter estimation for an electricity price model

11:00 – Coffee.

11:30 – Y. Belopolskaya. Probabilistic representations for classical and generalized solutions of the Cauchy problem for quasilinear and fully nonlinear systems of parabolic equations

12:10 – M. F. Agoitia. Modelling electricity prices with polynomial processes

12:30 – Lunch (Mensa, Hochwaldstr. 12, 02763 Zittau)

13:30 – A. N. Shiryaev. Bayesian disorder problems on the filtered probability spaces.

14:30 – D. B. Rokhlin. Verification problem for viscosity solutions and stochastic Perron’s method.

15:30 – Coffee.

16:00 – Y. Läßig. Estimating Seasonalities in Energy Markets.

16:20 – Wergieluk. Structural models of spot electricity markets

16:40 – S. Bachmann. Theorem of Yamada, Watanabe and Coupling by Reflection for Stochastic Delay Differential Equations

17:00 – End of the second day.

**Day 3. Numerical methods. 25.03.2015, Building ZII, Room 209**

 **(Schliebenstraße 21. 02763 Zittau)**

9:30 – V. N. Egorova. New fixing-domain transformations for non-linear option pricing models.

10:00 – Z. Bučková. ADE Methods - Numerical analysis and application to linear and nonlinear Black-Scholes models.

10:30 – G.I. Belyavsky, N. V. Danilova. The fair price calculation of the European option in the case on (B,S)-market model based on the random walk with missing elements.

11:00 – Coffee.

11:30 – T. A. Vasilyeva. L - stability of thrice implicit difference schemes of eighth order of approximation for ODEs stiff systems

12:00 - M. Ehrhardt. Modeling stochastic correlation.

12:30 – Lunch (Mensa, Hochwaldstr. 12, 02763 Zittau)

13:30 – I. P. Gavrilyuk. Efficient algorithms for abstract differential equations with applications to PDEs.

14:30 – L. G. Vulkov. Compact Difference Schemes for Option Pricing Liquidity Shocks Models.

15:00 – L. Trussardi. A kinetic equation for modelling irrationality and herding effects

15:30 – Coffee.

16:00 – T. Gylov. On a Nonlocal Problem for a Parabolic Integro-Differential Equation in Option Pricing with Switching Liquidity.

16:30 – E. Nemchenko. Numerical probabilistic approaches to solution of the Cauchy problem for semilinear parabolic equations.

16:50 – A. Grigorieva. A numerical algorithm to construct a generalized solution of a quasilinear system of parabolic equations.

17:10 – End of the third day.

16:40 – SB meeting of STRIKE (**Building ZIII, Room 413**)

19:00 – Reception of lord mayor of Zittau and rector of the University of Applied Sciences Zittau/Goerlitz in the town hall Zittau (Markt 1, 02763 Zittau).

**Day 4. Optimization. 26.03.2015, Building ZII, Room 209**

 **(Schliebenstraße 21. 02763 Zittau)**

9:30 – A. Ellanskaya. Utility Maximization and Utility Indifference Price for Exponential Semi-martingale Models and HARA Utilities

10:00 – R. Serrano. Martingale approach to utility maximization in jump models with differential rates and marked point processes

10:30 – I. P. Yamshchikov. Portfolio optimization with an exogenous random liquidation time.

11:00 – Coffee.

11:30 – M. Keller-Ressel. Implied Volatilities from Strict Local Martingales

12:30 – Lunch (Mensa, Hochwaldstr. 12, 02763 Zittau)

13:30 – J. Merker. On optimal control of systems of elliptic partial differential inequalities

14:00 - S. Pickenhain. Infinite Horizon Optimal Control Problems and Pseudospectral Methods for the Solution.

14:30 – N. Tauchnitz. Pontryagins Maximum Principle for Infinite Horizon Optimal Control Problems with State Constraints

15:00 – G. Mironenko. A diffusion stochastic control problem with resource constraints.

15:30 – Coffee.

16:00 – I. Höfers. Portfolio optimization under dynamic risk constraint.

16:20 – M. A. Kharitonov. The Operating Core of an Organization: A Constrained Optimization Model.

16:40 – A. Krakhotkin. On minimizing the expected time of beating a benchmark in a factor diffusion model.

17:00 - Posters’ session. A. Shardin. Partly observable stochastic optimal control problems for an energy storage.

17:20 – End of the fourth day.

**Day 5. Industry day. 27.03.2015, Building ZIV, Room 0.01**

 **(Theodor-Körner-Allee 8, 02763 Zittau)**

9:30 – A. Tihonov (Head of Search Analytics in Yandex). Cluster analysis. Ticks and tips.

11:00 – Coffee.

11:30 – Oberbichler (Analyst, Sachsen Asset Management). A practical guide to the analysis of derivatives

12:30 – Lunch (Mensa, Hochwaldstr. 12, 02763 Zittau)

13:30 – E. Vasin (Quant at Quantstellation, London) Risk modelling in equities: theory vs practice.

14:30 – M. Levin, (Chief Data Scientist – Yandex Data Factory) Advanced Machine Learning in Business

15:30 – Coffee. End of the fifth day.