Program MMEI-2017

Monday 4.9.2017

8:20-9:20 Registration
9:20-9:30 Openning session
9:30-10:30 Plenary talk
Room 109
Chair: Jiří V. Outrata
Vladimir Shikhman
Algorithmic Principle of Least Revenue for Finding Market Equilibria

10:30-11:00 coffee break

11:00-12:15 Contributed Sessions
Room 109
Session: Parameterized Optima and Equilibria and their Applications in Economics
Chair: Jiří V. Outrata
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Michal Červinka
Scholtes-type Regularization Method for Cardinality-Constrained Optimization Problems with an Application in Sparse Robust Portfolio Optimization

Petr Beremlijski
On solution of 3D contact shape optimization problems with Coulomb friction based on domain decomposition

Jiří V. Outrata
On the Aubin property of a class of parameterized variational systems

Room 108
Session: Mathematical modelling in finance
Chair: Igor Melicherčík
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Soňa Kilianová
Dynamic Worst Case Portfolio Optimization via a Hamilton-Jacobi-Bellman Equation

Tomáš Cipra
Common Shock Approach to Default Risk

Igor Melicherčík
AVaR Based Dynamic Portfolio Hedging Strategy

12:15-14:25 Lunch

14:30-15:45 Contributed Sessions
Room 109
Session: Chance constrained problems – properties and applications
Chair: Martin Branda
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Norman Goll
Bounds for chance constrained optimization problems

Bismark Singh
An Adaptive Model with Joint Chance Constraints for a Hybrid Wind-Conventional Generator System

Martin Branda
Fixed interval scheduling on identical machines - robustness and algorithms

Room 108
Session: Change point detection and related statistical topics
Chair: Zuzana Prášková
****
Martina Nardon
Probability weighting functions

Matúš Maciak
Post-Selection Inference in Regression Models with Change Points and Shape Constraints

Zuzana Prášková
Detection breaks in panel data

15:45-16:15 **Welcome Meeting** coffee break

16:15-17:30 Contributed Sessions
Room 109
Session: Optimization models and methods for engineering problems I
Chair: Pavel Popela
****
Dušan Hrabec
Advances in stochastic programming approach to pricing and advertising in network design problems

Jiří Franek
The Efficiency Improvement of selected Czech industries in 2008 - 2015

Richard Cimler
Effective solution of synchronization problem in directed graph

Room 108
Session: Mathematical modelling in finance
Chair: Igor Melicherčík
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Diana Barro
Optimal portfolio selection integrating non-financial criteria

Ján Komadel
Optimal trade execution under endogenous pressure to liquidate

Raul Martinez Noriega
Optimizing the production cost of minting

Tuesday 5.9.2017

9:30-10:30 Plenary talk
Room 109
Chair: Miloš Kopa
Csaba Fábián
On first-order methods in stochastic programming

10:30-11:00 coffee break

11:00-12:15 Contributed Sessions
Room 109
Session: Optimization models and methods for engineering problems II
Chair: Pavel Popela
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Jakub Kůdela
FEM based optimal beam design: convex reformulation and probabilistic robust design

Frantisek Zapletal
Multi-stage emissions management problem of a steel company

Lukáš Kokrda
The Modified Optimum Reliable Beam Design Problem Solved by Penalty Approach

Room 108
Session: Stochastic optimization in finance
Chair: Miloš Kopa
****
Barbora Petrová
Multivariate stochastic dominance in multivariate normal distribution

Sebastiano Vitali
Pension fund ALM with stochastic dominance, hedging derivatives and contamination

Miloš Kopa
Portfolio Optimization based on DARA Stochastic Dominance

12:15-14:25 Lunch

15:00-17:00 **Excursion in the castle of Jindřichův Hradec**

18:00-22:00 **Conference dinner in hotel Černý Orel**

Wednesday 6.9.2017

9:30-10:30 Plenary talk
Room 109
Chair: Alois Pichler
Asgeir Tomasgard
Using stochastic programming to analyse demand response in European electricity markets

10:30-11:00 coffee break

11:00-12:15 Contributed Sessions
Room 109
Session: Optimization on particular setting
Chair: Petr Volf
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Lucie Schaynová
A Nutrition Adviser's Menu Planning for a Client and the Client's Family Using a Linear Optimization Model

Mahmoud Gad
Adaptive Thresholding Technique for Solving Optimization Problems on Attainable Sets of (Max, Min) - Linear Systems

Petr Volf
Quantile optimization problem with censored data

Room 108
Session: Stochastic optimization problems
Chair: Ronald Hochreiter
****
Karel Sladký
Risk-sensitive Average Optimality in Markov and semi-Markov Decision Processes

Alois Pichler
Topics in Multistage Stochastic Optimization

Ronald Hochreiter
(Open Source) Multi-Stage Scenario Tree Generation

12:15-14:25 Lunch

14:30-15:45 Contributed Sessions
Room 109
Session: Scenario Generation for Stochastic Optimization
Chair: Petr Lachout
****
Vlasta Kaňková
Empirical Estimates and Scenario Generation in Optimization Problems with Second Order Stochastic Dominance Constraints

Jaromír Hošek
Scenario generation for incomplete recourse problems

Petr Lachout
A stochastic optimization scheme with random decision points

Room 108
Session: Stochastic optimization – applications and algorithmic issues
Chair: Michal Houda
****
Martin Šmíd
MS++ - a project of a C++ library for solving multi-stage stochastic problems

Michal Houda
Data envelopment analysis within evaluation of the efficiency of firm productivity

Eman Mohamed
Short Term Forecasting for Electricity Demand in Egypt

15:45-16:15 **Farewell Meeting** coffee break