

Krasovsky Institute of Mathematics and Mechanics
Sobolev Institute of Mathematics
Melentiev Energy Systems Institute
Higher School of Economics, Nizhny Novgorod
Ural Federal University
Novosibirsk State University

18th International Conference on
**Mathematical Optimization Theory
and Operations Research
(MOTOR – 2019)**

<http://motor2019.uran.ru/>

Ekaterinburg · Russia
July 8 – 12, 2019

Technical Program

MONDAY, July 8

Room A

09.40 – 10.00 Opening session

10.00 – 10.50 Plenary lecture: **Prof. Olga Battaia**

10.50 – 11.40 Plenary lecture: **Prof. Christoph Dürr**

11.40 – 12.10 Coffee break

12.10 – 13.00 Plenary lecture: **Prof. Vitaly Strusevich**

13.00 – 15:00 Lunch and leisure

Room A	Room B	Room C
15.00 – 17.00 Tutorials: 15.00 – 15.40 Prof. Oleg Khamisov 15.40 – 16.20 Prof. Nenad Mladenovic 16.20 – 17.00 Prof. Alexander Strekalovsky	15.00 – 17.00 Session: Combinatorial optimization	15.00 – 17.00 Session: Optimal control and approximation
17.00 – 17.20 Coffee break		
Room A	Room B	Room C
17.20 – 19.00 Session: Mathematical programming	17.20 – 19.00 Session: Combinatorial optimization	17.20 – 19.00 Session: Optimal control and approximation

TUESDAY, July 9

Room A

10.00 – 10.50 Plenary lecture: **Prof. Angelo Sifaleras**

10.50 – 11.40 Plenary lecture: **Prof. Vadim Levit**

11.40 – 12.10 Coffee break

12.10 – 13.00 Plenary lecture: **Prof. Bertrand M.T. Lin**

13.00 – 15.00 Lunch and leisure

Room A	Room B	Room C
15.00 – 16.20 Tutorials: 15.00 – 15.40 Prof. Stephan Dempe 15.40 – 16.20 Prof. Evgeni A. Nurminski	15.00 – 16.20 Tutorials: 15.00 – 15.40 Prof. Tatjana Davidović 15.40 – 16.20 Prof. Alexander Kononov	15.00 – 17.00 Session: Game theory
Room A	Room B	
16.20 – 17.00 Session: Mathematical programming	16.20 – 17.00 Session: Combinatorial optimization	
17.00 – 17.20 Coffee break		
Room A	Room B	Room C
17.20 – 19.00 Session: Mathematical programming	17.20 – 19.00 Session: Combinatorial optimization	17.20 – 19.00 Session: Game theory

WEDNESDAY, July 10

Room A	Room B	Room C
10.00 – 11.40 Session: Operations research	10.00 – 11.40 Session: Data mining and computational geometry	10.00 – 11.40 Session: Integer programming
11.40 – 12.00 Coffee break		
Room A	Room B	Room C
12.00 – 13.00 Session: Operations research	12.00 – 13.00 Session: Data mining and computational geometry	12.00 – 13.00 Session: Integer programming
13.00 – 15.00 Lunch and leisure		
Room A	Room B	Room C
15.00 – 17.00 Session: Optimal control and applications	15.00 – 17.00 Session: Combinatorial optimization	15.00 – 17.00 Session: Mathematical programming
17.00 – 17.20 Coffee break		
Room A	Room B	Room C
17.20 – 19.00 Session: Optimal control and applications	17.20 – 19.00 Industrial session with financial group QIWI	17.20 – 19.00 Session: Mathematical programming

THURSDAY, July 11

Room A

10.00 – 10.50 Plenary lecture: **Prof. Oleg Burdakov**

10.50 – 11.40 Plenary lecture: **Prof. Alexander Grigoriev**

11.40 – 12.10 Coffee break

12.10 – 13.00 Plenary lecture: **Prof. Natalia Shakhlevich**

13.00 – 15.00 Lunch and leisure

Room A	Room B	Room C
15.00 – 17.00 Session: Scheduling	15.00 – 17.00 Session: Operations Research and Mathematical Economics	
17.00 – 17.20 Coffee break		
Room A	Room B	Room C
17.20 – 18.20 Session: Scheduling	17.20 – 19.00 Session: Operations Research and Mathematical Economics	

20.00 – 22.00 Gala Dinner & Closing of the Conference

TALK LIST

MONDAY, July 8

09.40-10.00: Opening session (Room A)

Plenary lectures (Room A)

Chair Prof. Michael Khachay

10.00-10.50: **Prof. Olga Battaia** (ISAE-Supaero, Toulouse, France)
Decision under ignorance: a comparison of existing criteria in a context of linear programming

10.50-11.40: **Prof. Christoph Dürr** (Sorbonne Université, France)
Bijjective analysis of online algorithms

11.40-12.10 Coffee-break

12.10-13.00: **Prof. Vitaly Strusevich** (University of Greenwich, UK)
Design of fully polynomial time approximation schemes for non-linear Boolean programming problems

Tutorials (Room A)

Chair Prof. Stephan Dempe

15.00-15.40: **Prof. Oleg Khamisov**

The fundamental role of concave programming in continuous global optimization

15.40-16.20: **Prof. Nenad Mladenovic**

Solving nonlinear system of equations as an optimization problem

16.20-17.00: **Prof. Alexander Strekalovsky**

Modern methods of non-convex optimization

17.00-17.20: Coffee-break

Session talks

Mathematical programming (Room A)

Chair Prof. Olga Battaia

17.20-17.40: Stephan Dempe

Computing local optimal solutions of the bilevel optimization problem using the KKT approach

17.40-18.00: Maria Barkova

On generating nonconvex optimization test problems

18.00-18.20: Fedor Stonyakin, Mohammad Alkousa, Alexander Titov and Victoria Piskunova

On some methods for strongly convex optimization problems with one functional constraint

18.20-18.40: Tatiana Tchemisova and Olga Kostyukova

Phenomenon of Immobility in study of convex optimization problems

18.40-19.00: Sergey Semenov and Nikolai Zolotykh

A dynamic algorithm for constructing the dual representation of a polyhedral cone

Combinatorial optimization (Room B)

Chair Prof. Vadim Levit

15.00-15.20: René Van Bevern, Till Fluschnik and Oxana Tsidulko
On $(1 + \varepsilon)$ -approximate data reduction for the Rural Postman Problem

15.20-15.40: Edward Gimadi and Ekaterina Shin
On random MST problem with given diameter

15.40-16.00: Anton Eremeev, Alexander Kelmanov, Mikhail Y. Kovalyov and Artem Pyatkin
Maximum diversity problem with squared euclidean distance

16.00-16.20: Aleksey Glebov
A 5/6-approximation algorithm for the maximization version of the pseudo-metric TSP

16.20-16.40: Yulia Kovalenko and Aleksey Zakharov
Pareto-based hybrid algorithms for the bicriteria asymmetric travelling salesman problem

16.40-17.00: Victor Il'ev, Svetlana Il'eva and Alexander Morshinin
A 2-approximation algorithm for the graph 2-clustering problem

17.00-17.20: Coffee-break

17.20-17.40: Ivan Davydov and Daniil Tolstykh
An evolution based approach for the traffic lights optimization problem

17.40-18.00: Ivan Davydov and Petr Gusev
VNS based heuristic for the $(r|p)$ -centroid problem under l_1 metric

18.00-18.20: Sergey Khapugin and Andrey Melnikov
Local search approach for the medianoid problem with multi-purpose shopping trips

18.20-18.40: Alexander Petunin, Efim Polishchuk and Stanislav Ukolo.
A novel algorithm for construction of the shortest path between a finite set of nonintersecting contours on the plane

18.40-19.00: Oleg Zaikin and Stepan Kochemazov
Black-box optimization in an extended search space for SAT solving

Optimal control and approximation (Room C)

Chair Prof. Anatoly Antipin

15.00-15.20: Boris Ananyev

Control problem of parabolic system with incomplete information

15.20-15.40: Vitalii Arestov

Best approximation of a differentiation operator on the set of smooth functions with exactly or approximately given Fourier transform

15.40-16.00: Mikhail Gusev

Estimates of the minimal eigenvalue of the controllability Gramian for a system containing a small parameter

16.00-16.20: Elena Khoroshilova

On application of Lagrange approach in a terminal control problem with intermediate state constraints

16.20-16.40: Oxana Matviychuk

On ellipsoidal estimates for reachable sets of the control system

16.40-17.00: Nadezhda Maltugueva, Nikolay Pogodaev and Olga Samsonyuk

Optimality conditions and numerical algorithms for hybrid systems

17.00-17.20: Coffee-break

17.20-17.40: Lev Petrov

Using nonlinear interactions to control oscillations of dynamic systems

17.40-18.00: Vladimir Dykhta and Stepan Sorokin

Feedback minimum principle for optimal control problems in discrete-time systems and its applications

18.00-18.20: Olga Samsonuyk, Stepan Sorokin and Maxim Staritsyn

Feedback optimality conditions with weakly invariant functions for nonlinear problems of impulsive control

18.20-18.40: Al'fiya Surina and Alexander Tyrsin

Risk management in Gaussian stochastic systems as an optimization problem

18.40-19.00: Elena Tabarintseva

The accuracy of approximate solutions for a boundary value inverse problem with final overdetermination

TUESDAY, July 9

Plenary lectures (Room A)

Chair Prof. Yury Kochetov

10.00-10.50: **Prof. Angelo Sifaleras** (University of Macedonia, Greece)
Exterior point simplex-type algorithms for linear and network optimization problems

10.50-11.40: **Prof. Vadim Levit** (Ariel University, Israel)
Critical and maximum independent sets revisited

11.40-12.10: Coffee-break

12.10-13.00: **Prof. Bertrand M.T. Lin** (National Chiao Tung University, Taiwan)
An overview of the relocation problem

Tutorials (Room A)

Chair Prof. Oleg Khamisov

15.00-15.40: **Prof. Stephan Dempe**

Bilevel optimization: the model and its transformations

15.40-16.20: **Prof. Evgeni A. Nurminski**

Projection problems and problems with projection

Mathematical programming (Room A)

Chair Prof. Angelo Sifaleras

16.20-16.40: Anatoly Antipin and Elena Khoroshilova

A method of cross-sections of state constraints by convex programming problems

16.40-17.00: Vladimir Erokhin

Regularization and matrix correction of improper linear programming problems

17.00-17.20: Coffee-break

17.20-17.40: Andrei Orlov and Tatiana Gruzdeva

The local and global searches in bilevel problems with a matrix game at the lower level

17.40-18.00: Simeon Vom Dahl and Andreas Löhne

On polyhedral d.c. optimization problems

18.00-18.20: Evgeni Nurminski and Natalia Shamray

Discrete time Lyapunov-type convergence conditions for recursive sequences in optimization

18.20-18.40: Anton Ereemeev, Nikolay Tyunin and Alexander Yurkov

Non-convex quadratic programming problems in short wave antenna array optimization

18.40-19.00: Vladislav Sovrasov

Comparison of several stochastic and deterministic derivative-free global optimization algorithms

Tutorials (Room B)

Chair Prof. Alexander Grigoriev

15.00-15.40: **Prof. Tatjana Davidović**

Distributed memory based parallelization of metaheuristic methods

15.40-16.20: **Prof. Alexander Kononov**

Primal-dual method and online problems

Combinatorial optimization (Room B)

Chair Prof. Christoph Dürr

16.20-16.40: Christof Defryn, Julian Golak, Alexander Grigoriev and Veerle Timmermans

Inland waterway efficiency through skipper collaboration and joint speed optimization

16.40-17.00: Michael Khachay and Yuri Ogorodnikov

Approximation scheme for the capacitated vehicle routing problem with time windows and non-uniform demand

17.00—17.20: Coffee-break

17.20-17.40: Luka Matijević, Tatjana Davidović, Vladimir Ilin and Panos Pardalos

Matheuristic approach to asymmetric vehicle routing problem with time window

17.40-18.00: Tatiana Levanova and Alexander Gnusarev

Development of ant colony optimization algorithm for competitive p -median facility location problem with elastic demand

18.00-18.20: Alexander Semenov

Merging variables: one technique of search in pseudo-Boolean optimization

18.20-18.40: Artem Ripatti and Vadim Kartak

Bounds for non-IRUP instances of cutting stock problem with minimal capacity

18.40-19.00: Hanan Shabana and Mikhail Volkov

Using Sat solvers for synchronization issues in partial deterministic automata

Game theory (Room C)

Chair Prof. Vladimir Mazalov

15.00-15.20: Natalia Aizenberg and Nikolai Voropai
The interaction of consumers and load serving entity to manage electricity consumption

15.20-15.40: Igor' Izmest'ev and Viktor Ukhobotov
On a single-type differential game with a non-convex terminal set

15.40-16.00: Dmitry Khlopin
General limit value for stationary Nash equilibrium

16.00-16.20: Ekaterina Kolpakova
Open-loop strategies in nonzero-sum differential game with multilevel hierarchy

16.20-16.40: Ildus Kuchkarov and Ovanes Petrosian
On a class of linear quadratic non-cooperative differential games with continuous updating

16.40-17.00: Ovanes Petrosian and Anna Tur
Hamilton-Jacobi-Bellman equations for non-cooperative differential games with continuous updating

17.00-17.20: Coffee-break

17.20-17.40: Valeriy Marakulin
Spatial equilibrium in a multidimensional space: an immigration-consistent division into countries centered at barycenter

17.40-18.00: Leon Petrosyan and Yaroslavna B. Pankratova
Equilibrium and cooperation in the repeated hierarchical games

18.00-18.20: Vladimir Mazalov and Elena Parilina
Game of competition for opinion with two centers of influence

18.20-18.40: Anna N. Rettieva
Coalition stability in dynamic multicriteria games

18.40-19.00: Ivan Belyaev, Igor Bykadorov
Equilibrium in Dixit-Stiglitz-Krugman model: the case of nonlinear production costs

WEDNESDAY, July 10

Operations research (Room A)

Chair Prof. Igor Bykadorov

10.00-10.20: Sergey Lavlinskii, Artem Panin and Alexander Plyasunov
Stackelberg model and public-private partnerships in the natural resources sector of Russia

10.20-10.40: Alexander Petunin, Alexander Chentsov, Alexander Seseikin and Pavel Chentsov
Tool path design for the CNC sheet metal cutting machines: optimization models and "dynamic" constraints

10.40-11.00: Anastasia Tavaeva, Dmitry Kurennov, Vladimir Krotov and Alexander Petunin
A cost minimizing at laser cutting of sheet parts on CNC machines

11.00-11.20: Guzel Shkaberina, Viktor Orlov, Elena Tovbis and Lev Kazakovtsev
Identification of the optimal set of informative features for the problem of separating a mixed production batch of semiconductor devices for the space industry

11.20-11.40: Tatyana Makarovskikh and Egor Savitskiy
Optimization of pierce points number for cutting plan with combined cuts

11.40-12.00: Coffee-break

12.00-12.20: Sergey I. Kumkov, Zinaida V. Kataeva and Oleg V. Shilovskikh
Procession of post-operation ophthalmic data under conditions of uncertainty

12.20-12.40: Arseniy Spiridonov and Sergey Kumkov
Non-conflict merging aircraft flows under given arrival schedule

12.40-13.00: Igor Vasilyev, Pasquale Avella, Maurizio Boccia and Sandro Viglione
A local branching MIP heuristic for a real-world curriculum-based course timetabling problem

Data mining and computational geometry (Room B)

Chair Prof. Adil Erzin

10.00-10.20: Vladimir Berikov

Semi-supervised classification using multiple clustering and low-rank matrix operations

10.20-10.40: Sergey Ivanov and Irina Zhenevskaya

Estimation of the necessary sample size for approximation of stochastic optimization problems with probabilistic criteria

10.40-11.00: Valeriy Kalyagin

Clustering in random variables network

11.00-11.20: Konstantin Kobylkin and Irina Dryakhlova

Approximation algorithms for piercing special families of hippodromes: an extended abstract

11.20-11.40: Anna Panasenko

A PTAS for one cardinality-weighted 2-clustering problem

11.40-12.00: Coffee-break

12.00-12.20: Alexander Kelmanov and Vladimir Khandeev

The problem K -means and given J -centers: polynomial solvability in one dimension

12.20-12.40: Anna Lempert, Alexander Kazakov and Quang Mung Le

On the thinnest covering of fixed size containers with non-Euclidean metric by incongruent circles

12.40-13.00: Artyom Makovetskii, Sergei Voronin, Vitaly Kober and Aleksei Voronin

A generalized point-to-point approach for orthogonal transformations

Integer programming (Room C)

Chair Prof. Nikolai Zolotykh

10.00-10.20: Maximilian John and Andreas Karrenbauer
Dynamic sparsification for quadratic assignment problems

10.20-10.40: George Bolotashvili
*Expansion (m, k) facets, in the case of $k \geq 4, k - \text{even}, m = 3k - 1$,
for a linear ordering polytope*

10.40-11.00: Dmitry Griбанov and Dmitry Malishev
Integer conic function minimization based on the comparison oracle

11.00-11.20: Aigul Fabarisova and Vadim Kartak
An integer programming approach to the irregular polyomino tiling problem

11.20-11.40: Anna Kozlova and Andrei Nikolaev
*Simulated annealing approach to verify vertex adjacencies in the traveling
salesperson polytope*

11.40-12.00: Coffee-break

12.00-12.20: Andrei Nikolaev
On vertex adjacencies in the polytope of pyramidal tours with step-backs

12.20-12.40: Inna Urazova, Ruslan Simanchev and Yury Kochetov
Polyhedral attack on the graph approximation problem

12.40-13.00: Lidia Zaozerskaya
Analysis of integer programming model of academic load distribution

Optimal control and applications (Room A)

Chair Prof. Michael Gusev

15.00-15.20: Aleksandr Buldaev and Ivan Burlakov

Iterative method with exact fulfillment of constraints in optimal control problems

15.20-15.40: Alexander Chentsov, Alexey Grigoryev and Alexey Chentsov

Procedures of local optimization in routing problems with constraints

15.40-16.00: Viktor Ukhobotov, Konstantin Kudryavtsev and Irina Stabulit

On the problem of comparing fuzzy numbers

16.00-16.20: Evgeniy Krupennikov

On estimates of the solutions of inverse problems of optimal control

16.20-16.40: Eugeniia Markova and Inna Sidler

Optimization problem in an integral model of developing system without prehistory

16.40-17.00: Marina Plekhanova, Guzel Baybulatova

Problems of hard control for a class of degenerate fractional order evolution equations

17.00-17.20: Coffee-break

17.20-17.40: Alexander Shaburov

Asymptotic expansion of a solution for one singularly perturbed optimal control problem with a convex integral quality index depends on slow variables and smooth control constraints

17.40-18.00: Robert Namm and Georgiy Tsoy

A modified duality scheme for solving 3D elastic problem with a crack

18.00-18.20: Yuri Kan and Sofia Vasil'eva

Deterministic approximation of stochastic programming problems with probabilistic constraints

18.20-18.40: Vladimir Ushakov and Pavel Lebedev

Iterative methods for optimal packing approximations constructing for non convex polygons

18.40-19.00: Alexander Gornov, Tatiana Zarodnyuk, Anton Anikin and Pavel Sorokovikov

The stochastic coverings algorithm for solving applied optimal control problems

Combinatorial optimization (Room B)

Chair Prof. Artem Pyatkin

15.00-15.20: Gennady Zabudsky and Natalia Veremchuk
On the one-dimensional space allocation problem with partial order and forbidden zones

15.20-15.40: Polina Kononova and Igor Kulachenko
The VNS approach for a consistent capacitated vehicle routing problem under the shift length constraints

15.40-16.00: Dragan Urosevic, Yiad Ibrahim Yousef Alghoul, Zhazira Amirgaliyeva and Nenad Mladenovic
Less is more: Tabu search for quadratic bipartite programming problem

16.00-16.20: Timur Merembayev, Yedilkhan Amirgaliyev, Shahriar Shamiluulu and Didar Yedilkhan
Using machine learning algorithm for diagnosis of stomach disorders

16.20-16.40: Anton Ushakov and Igor Vasilyev
A computational comparison of parallel and distributed k-median clustering algorithms on large-scale image data

16.40-17.00: Evgenii Goncharov
Variable neighborhood search for the resource constrained project scheduling problem

17.00-17.20: Coffee-break

Industrial session (Room B)

Chair Dr. Alexander Kurochkin

17.20-19.00: Yury Dubov, Andrey Kutsenko and Maxim Ivanov (Financial group QIWI)

Payment traffic forecast. Analysis of user behavior.

Classification of common user types depending on their payment history.

Detecting users who are probably about to stop using the company's services.

Network traffic anomaly detection.

Mathematical programming (Room C)

Chair Prof. Alexander Strekalovsky

15.00-15.20: Vladimir Ushakov, Aleksandr Ershov and Maksim Pershakov
Counterexamples in the theory of α -sets

15.20-15.40: Fedor Stonyakin, Darina Dvinskikh, Pavel Dvurechensky, Alexey Kroshnin, Olesya Kuznetsova, Artem Agafonov, Alexander Gasnikov, Alexander Turin, Cesar Uribe, Dmitry Pasechnyuk and Sergei Artamonov
Gradient method for problems with inexact model of the objective

15.40-16.00: Ilya Minarchenko
On minimization of a quadratic function with one negative eigenvalue

16.00-16.20: Vladimir Semenov, Yana Vedel and Viacheslav Dudar
Convergence of the optimistic mirror-prox method for saddle point problems and variational inequalities

16.20-16.40: Igor Kandoba and Alexander Uspenskiy
On one applied problem of vector optimization

16.40-17.00: Nadezhda Muravyova and Oksana Pichugina
The polyhedral-surfaced cutting-plane method for linear combinatorial optimization

17.00-17.20: Coffee-break

17.20-17.40: Leonid Popov
Methods for matrix games with mixed strategies and quantile pay off function

17.40-18.00: Vitaly Zhadan
Variant of simplex method for second-order cone programming

18:00-18:20 Liudmila Prokudina and Dmitrii Bukharev
Simulation of flow regimes of non-isothermal liquid films

18.20-18.40: Olga Murav'eva
Matrix correction of inconsistent systems of linear inequalities using the matrix l_1 norm

THURSDAY, July 11

Plenary lectures (Room A)

Chair Prof. Alexander Kononov

10.00-10.50: **Prof. Oleg Burdakov** (Linköping University, Sweden)

Node partitioning and cycles creation problem

10.50-11.40: **Prof. Alexander Grigoriev** (Maastricht University School of Business and Economics, Netherlands)

A survey on possible and impossible attempts to solve the tree-width problem via ILPs

11.40-12.10: Coffee-break

12.10-13.00: **Prof. Natalia Shakhlevich** (University of Leeds, UK)

On a new approach for optimization under uncertainty

Scheduling (Room A)

Chair Prof. Vitaly Strusevich

15.00-15.20: Sergey Sevastyanov

Some positive news on the proportionate open shop problem

15.20-15.40: Ilya Chernykh and Ekaterina Lgotina

How the difference in travel time affects the optima localization for the routing open shop

15.40-16.00: Alexander Kononov, Julia Memar and Yakov Zinder

Scheduling with limited storage - a polynomial-time algorithm and efficient heuristics

16.00-16.20: Adil Erzin and Roman Plotnikov

The convergecast scheduling problem on a regular triangular grid

16.20-16.40: Ilya Chernykh and Antonina Khramova

Another algorithm for the two-machine open shop and its application to one routing problem

16.40-17.00: Eugene Vitvitsky, Saida Khairova, Oksana Kulikova, Elena Khoroshilova and Bari Khairov

Application of the tabu search algorithm to the task of optimal scheduling of small freight shipping in the city

17.00-17.20 Coffee-break

17.20-17.40: Roman Plotnikov and Adil Erzin

Constructive heuristics for min-power bounded-hops symmetric connectivity problem

17.40-18.00: Artem Pyatkin and Mikhail Golovachev

Routing open shop with two nodes, unit processing times and equal number of jobs and machines

18.00-18.20: Yu. Kovalenko, A. Kononov

Approximation algorithms for speed scaling scheduling of parallel jobs

18.20-18.40: Ketevan Kutkhashvili

On one stochastic model of schedule theory

18.40-19.00: Anna Romanova

Minimizing resource cost in project scheduling problem with accumulative resources of time-dependent cost

Operations Research and Mathematical Economics (Room B)

Prof. Bertrand M.T. Lin

15.00-15.20: Igor Bykadorov

Social optimality in international trade under monopolistic competition

15.20-15.40: Egor Grishin, Alexander Lazarev, Semen Galakhov, Elena Musatova and German Tarasov

Algorithms of the organization of locomotive's maintenance

15.40-16.00: Yuri Kochetov and Natalia Shamray

Genetic algorithm for optimizing of ambulance fleet allocation

16.00-16.20: Anton Kolosnitsyn

Stochastic analogue of long-term development model of power energy systems

16.20-16.40: Vladimir Servakh and Svetlana Malakh

The net present value maximization in inventory management system

16.40-17.00: Dimitrije D. Čvokić, Yury Kochetov, Alexander Plyasunov and Aleksandar Savić

The competitive hub location under the price war

17.00-17.20 Coffee-break

17.20-17.40: Oleg Khamisov and Natalia Mikhakhanova

Numerical methods for finding equilibrium on heat energy markets

17.40-18.00: Igor Bykadorov, and Olga Tilz

Retailing under monopolistic competition: a comparative analysis

18.00-18.20: Damir Gainanov, Nenad Mladenovic and Varvara Rasskazova

Simplicial vertex heuristic in solving the railway arrival and departure paths assignment problem

18.20-18.40: Yaroslav Sali

One branch-and-bound scheme for dynamic programming in precedence-constrained traveling salesman

18.40-19.00: Anatoly V. Panyukov and Yuliya F. Leonova

Cycle merging algorithm for MAX~TSP problems.