

| | MONDAY June 18th | | | |
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| | Room 1201 | Room 1202 | Room 516 | Room 520 |
| 11:30-12:30 | M1A Supply Chain Management 1 Chair: Boris Sokolov | M1B Scheduling 1 Chair: Yuri Sotskov | M1C International Logistics Chair: Victor Ostroga | M1D Vehicle Routing 1 Chair: Yury Nikulin |
| 11:30-11:50 | <u>Zoé Krug</u> , Olga Battaïa and Romain Guillaume <i>The use of two-stage approach with R^* criterion to solve a multi-period closed loop supply chain design problem</i> | <u>Florian Fontan</u> , Pierre Lemaire and Nadia Brauner <i>On the complexity of scheduling problems with processing-time dependent profit maximization</i> | <u>Anastasiya Shimanskaya</u> <i>The processes of digital transformation of the customs sphere in terms of the formation of digital economies</i> | <u>Vitaly M. Demidenko</u> <i>Mathematical models of vehicle routing in logistics chains of finished products</i> |
| 11:50-12:10 | Helena Zhivitskaya and <u>Yuliya Artsiomchyk</u> <i>Improving analytical mechanism for supply chain performance management</i> | <u>Ilya Fridman</u> , Yakov M. Shafransky and Erwin Pesch <i>Constructing the single-machine schedule under uncertainty of two types of parameters</i> | <u>Nikita Kudriashou</u> <i>Methods for assessing the implementation of the country's transit potential as current line of research in the field of international logistics</i> | Maxim Panfilov, <u>Alina Kovalenko</u> and Yauheni Kisialiou <i>Distribution planning for the gas company case</i> |
| 12:10-12:30 | <u>Boris Sokolov</u> and Dmitry Ivanov <i>Structure dynamics control for integrated logistics planning in the supply chain</i> | <u>Yuri Sotskov</u> and Natalja Egorova <i>Single-machine scheduling with uncertain durations for optimizing service logistics with one truck</i> | Aleksandra Naydenko and Victor Ostroga <i>Modern view on the logistics system of the Republic of Belarus in the context of a globalizing world economy</i> | <u>Alaleh Maskooki</u> and <u>Yury Nikulin</u> <i>Modeling efficient routing for a service boat</i> |
| 13:00-14:00 | M2A Supply Chain Management 2 Chair: Volodymyr Zaslavskiy | M2B Scheduling 2 Chair: Elena Musatova | M2C Energy Logistics 1 Chair: Markus Brachner | M2D Vehicle Routing 2 Chair: Yakov Zinder |
| 13:00-13:20 | <u>M. Emre Keskin</u> and Yunus Demir <i>Workforce balancing for a retail store chain</i> | <u>Yakov Shafransky</u> and Viktor Shinkarevich <i>Applying an alternative approach for establishing the complexity of open problems</i> | <u>Yauhen Maisiuk</u> and Irina Gribkovskaia <i>Construction of robust supply vessel schedules under uncertain weather conditions</i> | <u>Camilo Velandia</u> and Wilson Adarme <i>Proposal of distribution of last mile of food products with the use of bicycles or tricycles of load</i> |
| 13:20-13:40 | <u>Ibrahim Labaran Ali</u> , Abigail Hird and Robert Ian Whitfield <i>Using LSP network position to share supply chain risk information</i> | Alexander Kononov and <u>Irina Lushchakova</u> <i>Parallel machine scheduling models with the total machine cost</i> | Yauheni Kisialiou, Irina Gribkovskaia and Ellen Karoline Norlund <i>Robust supply vessel planning with uncertain demand</i> | <u>Sergey Markov</u> and Ivan Kaipau <i>Nesting irregular shapes</i> |
| 13:40-14:00 | <u>Volodymyr Zaslavskiy</u> and Andrzej Aftowicz <i>Challenges for logistics in creation and use of reusable packaging for automotive industry: system approach</i> | Alexander Lazarev, <u>Elena Musatova</u> and Yakov Zinder <i>Algorithms for scheduling the two-way traffic on a single track</i> | <u>Markus Brachner</u> and Lars Magnus Hvattum <i>Stochastic factors and interference effects in offshore Search-and-Rescue preparedness optimization models</i> | <u>Yakov Zinder</u> , Anthony Mackay, Yefei Zhang, Lucy MacMillan, Joey Fung and Hanyu Gu <i>Multi-objective vehicle routing problem with time windows and simultaneous deliveries and pickups</i> |
| 16:00-17:00 | M3A Supply Chain Management 3 Chair: Sergei Teryokhin | M3B Production Logistics Chair: Boris Rozin | M3C Energy Logistics 2 Chair: Katerina Shaton | M3D Inventory management Chair: Nir Halman |
| 16:00-16:20 | Volodymyr Petrivskiy and <u>Volodymyr Zaslavskiy</u> <i>Models and algorithms of logistics while ensuring profitability of beekeeping</i> | Aleksandr Pirogov, André Rossi and <u>Alexandre Dolgui</u> <i>Maximization of production line robustness under task time uncertainties at the line design stage</i> | <u>Victor Cunha</u> , Silvio Hamacher and Luciana Pessoa <i>An ILS heuristic for the pipe laying support vessel rescheduling problem</i> | <u>S. Armagan Tarim</u> and Onur Alper Kilic <i>A new heuristic for the non-stationary (s,S) policy</i> |
| 16:20-16:40 | <u>Evgeniy Yakushkin</u> and Victor Dravitsa <i>Actual aspects of improving logistics of consumer cooperatives in Belarus</i> | Oussama Ben Ammar and <u>Alexandre Dolgui</u> <i>Replenishment planning for two-level assembly systems under stochastic lead times: exact methods and metaheuristics</i> | Maya Pasichna and <u>Volodymyr Zaslavskiy</u> <i>Aggregation of energy information for analyzing effectiveness of energy generation structure</i> | <u>Sule Tarim</u> and Mustafa Cimen <i>Inventory costs and replenishment decisions considering the time value of money</i> |
| 16:40-17:00 | <u>Sergei Teryokhin</u> <i>Strategic electronic coordination improvement in buyer-supplier relationships: buyer dependency and investment in information systems perspectives</i> | Alexandre Dolgui, <u>Boris Rozin</u> and Genrikh Levin <i>Optimization of output and manufacturing intensities for batch processing of multiple products on multi-position transfer line under uncertainty of demand</i> | <u>Katerina Shaton</u> <i>An equilibrium model of the European gas market: A security of supply perspective</i> | <u>Nir Halman</u> and Giacomo Nannicini <i>When the newsvendor starts to sell lemonade: Approximating the continuous newsvendor problem</i> |

| | TUESDAY June 19th | | | |
|-------------|---|---|---|---|
| | Room 1201 | Room 1202 | Room 516 | Room 520 |
| 10:00-11:00 | T1A Transportation and Distribution 1 Chair: Mario Guajardo | T1B Arctic Logistics 1 Chair: Yury Redutskiy | T1C Econometric Modeling and Data Analysis Chair: Vladimir Malugin | T1D Service Logistics Chair: Alena Otto |
| 10:00-10:20 | <u>Chefi Triki</u> <i>Optimization models for the transportation procurement through combinatorial auctions</i> | <u>Victoria Holodkova</u> and <u>Pavel Konyukhovskiy</u> <i>Game-theoretic models for analyzing the processes of inter-country competition and cooperation in the development of Arctic resources</i> | <u>Anatoly Makarevich</u> <i>Automating the process of construction and application of time series models by means of machine learning</i> | <u>Valentina Klimenok</u> and <u>Alexander Dudin</u> <i>Stationary analysis of unreliable queueing system with redundancy protection</i> |
| 10:20-10:40 | <u>Alexander Dudin</u> , <u>Sergey Dudin</u> and <u>Olga Dudina</u> <i>The tool for optimization of customer access and routing in manufacturing and transportation networks</i> | <u>Yulia Danik</u> and <u>Mikhail Dmitriev</u> <i>Multi-criteria mathematical model for international negotiations support in the Arctic region</i> | <u>Aleksander Novopoltsev</u> and <u>Vladimir Malugin</u> <i>Statistical analysis and modelling of macro processes using micro data</i> | <u>Andrei Bandalouski</u> <i>Dynamic pricing approach for hotel revenue management</i> |
| 10:40-11:00 | <u>Mario Guajardo</u> , <u>Mikael Rönnqvist</u> , <u>Patrik Flisberg</u> and <u>Mikael Frisk</u> <i>Finding opportunities for collaborative transportation in a large data set</i> | <u>Yury Redutskiy</u> <i>Risk management perspective on workforce scheduling for safety systems maintenance for oil and gas facilities located in poorly accessible regions</i> | <u>Vladimir Malugin</u> <i>Regime switching models: Independent switching versus Markov switching</i> | <u>Alena Otto</u> <i>New optimization problems arising in civil applications of unmanned aerial vehicles (UAVs), or drones</i> |
| 11:30-12:30 | T2A Transportation and Distribution 2 Chair: Arild Hoff | T2B Arctic Logistics 2 Chair: Bjørnar Aas | T2C Information Technologies in Logistics Chair: Mikhail Fominykh | T2D Education Logistics Chair: Victor Dravitsa |
| 11:30-11:50 | <u>Anastasiya Drob</u> , <u>Anton Zakhtarenka</u> and <u>Ivan Kaipau</u> <i>Distribution logistics case in shoe retail</i> | <u>Sergey Demin</u> , <u>Fuad Aleskerov</u> , <u>Sergey Shvydun</u> and <u>Natalia Meshcheryakova</u> <i>Analysis of international maritime trade network in the Arctic region</i> | <u>Dmitrii Deviatkin</u> , <u>Ivan Smirnov</u> and <u>Margarita Ananyeva</u> <i>Approach to the extraction of financial and economic information from texts</i> | <u>Boris Zhalezka</u> , <u>Aliaksei Danilchanka</u> , <u>Kseniya Yakushenka</u> and <u>Volha Siniauskaya</u> <i>Digitalization of the education in the spheres of logistic, entrepreneurship and management</i> |
| 11:50-12:10 | <u>Maksim Barketau</u> , <u>Erwin Pesch</u> and <u>Yakov Shafransky</u> <i>Optimization aspects of railway terminals</i> | <u>Alina Kovalenko</u> <i>A comparative analysis of the Northern Sea Route as a potential alternative to the conventional route via Suez Canal for commercial cargo shipping</i> | <u>Volha Kazantsava</u> <i>Development of applications using modern database management technology and real-time analytics</i> | <u>Ryhor Prakapovich</u> , <u>Matsvei Rozanau</u> and <u>Ilya Tuzin</u> <i>Computer modeling of logistic robots group on a remote server</i> |
| 12:10-12:30 | <u>Arild Hoff</u> , <u>Juanjo Peiro</u> , <u>Angel Corberan</u> and <u>Rafa Marti</u> <i>Heuristics for the Capacitated Modular Hub Location Problem</i> | <u>Bjørnar Aas</u> and <u>Espen Fjellheim</u> <i>New emerging technologies and their applicability in the domain of Offshore Asset Protection in the Arctic</i> | <u>Mikhail Fominykh</u> and <u>Judith Molka-Danielsen</u> <i>Augmented reality: integrating human work in automation and Industry 4.0</i> | <u>Victor Dravitsa</u> and <u>Aliaksandr Reshetniak</u> <i>Logistics of support for multi-functional student documents and the development of electronic services</i> |
| 13:00-14:00 | T3A Transportation and Distribution 3 Chair: Boris Panshin | T3B Industry and Business Applications Chair: Nikolai Kasyanik | M3C Path Planning Chair: Igor Rubanov | T3D Packing and Partitioning Chair: Gunesh Erdogan |
| 13:00-13:20 | <u>Zeina Al Masry</u> , <u>Nabil Omri</u> , <u>Christophe Varnier</u> , <u>Noureddine Zerhouni</u> and <u>Brigitte Morello</u> <i>Predictive maintenance optimization approaches for a fleet of complex transport systems</i> | <u>Alena Melnikava</u> (Decisionbrain) <u>Evgeniy Novitskiy</u> (Geopolimer) <u>Ivan Kaipov</u> (Belvest) | <u>Mikhail Y. Kovalyov</u> , <u>Nir Halman</u> , <u>Alain Quilliot</u> , <u>Dvir Shabtay</u> and <u>Moshe Zofi</u> <i>Minimizing length and maximizing survival probability over paths of a directed multigraph</i> | <u>Vladimir Shlyk</u> <i>Number of vertices of the polytope of integer partitions: observations, results, and conjectures</i> |
| 13:20-13:40 | <u>Natalya Skirko</u> <i>Features of development of the transport and logistics services sector in the Republic of Belarus</i> | <u>Nikolai Kasyanik</u> (Corporate Group Santa) | <u>Victor Lepin</u> , <u>Mihai Talmaciu</u> and <u>Vladimir Benediktovich</u> <i>The weighted k-path vertex cover problem</i> | <u>Nicolai Pisaruk</u> <i>A new integer programming formulation for the multidimensional packing problems</i> |
| 13:40-14:00 | <u>Boris Panshin</u> <i>New directions in the study of information and analytical support of urban logistics for economic specialties</i> | | <u>Igor Rubanov</u> <i>Methods for searching several solutions of the DBM system</i> | <u>Gunes Erdogan</u> <i>A large neighbourhood search algorithm for the 3-dimensional bin packing problem</i> |