

Contents

Invited Talks

Algorithmic Issues in Energy-Efficient Computation	3
<i>Evripidis Bampis</i>	
Linear Superiorization for Infeasible Linear Programming	15
<i>Yair Censor and Yehuda Zur</i>	
Short Survey on Graph Correlation Clustering with Minimization Criteria . . .	25
<i>Victor Il'ev, Svetlana Il'eva, and Alexander Kononov</i>	
Wardrop Equilibrium for Networks with the BPR Latency Function	37
<i>Jaimie W. Lien, Vladimir V. Mazalov, Anna V. Melnik, and Jie Zheng</i>	
A Review on Network Robustness from an Information Theory Perspective . . .	50
<i>Tiago Schieber, Martín Ravetti, and Panos M. Pardalos</i>	
An Iterative Approach for Searching an Equilibrium in Piecewise Linear Exchange Model.	61
<i>Vadim I. Shmyrev</i>	
Handling Scheduling Problems with Controllable Parameters by Methods of Submodular Optimization.	74
<i>Akiyoshi Shioura, Natalia V. Shakhlevich, and Vitaly A. Strusevich</i>	

Discrete Optimization

Constant-Factor Approximations for Cycle Cover Problems	93
<i>Alexander Ageev</i>	
Precedence-Constrained Scheduling Problems Parameterized by Partial Order Width	105
<i>René van Bevern, Robert Brederick, Laurent Bulteau, Christian Komusiewicz, Nimrod Talmon, and Gerhard J. Woeginger</i>	
A Scheme of Independent Calculations in a Precedence Constrained Routing Problem.	121
<i>Alexander G. Chentsov and Alexey M. Grigoryev</i>	
On Asymptotically Optimal Approach to the m-Peripatetic Salesman Problem on Random Inputs	136
<i>Edward Kh. Gimadi, Alexey M. Istomin, and Oxana Yu. Tsidulko</i>	

Efficient Randomized Algorithm for a Vector Subset Problem	148
<i>Edward Gimadi and Ivan Rykov</i>	
An Algorithm with Approximation Ratio $5/6$ for the Metric Maximum m -PSP	159
<i>Aleksey N. Glebov and Anastasiya V. Gordeeva</i>	
An Approximation Algorithm for a Problem of Partitioning a Sequence into Clusters with Restrictions on Their Cardinalities	171
<i>Alexander Kel'manov, Ludmila Mikhailova, Sergey Khamidullin, and Vladimir Khandeev</i>	
A Fully Polynomial-Time Approximation Scheme for a Special Case of a Balanced 2-Clustering Problem	182
<i>Alexander Kel'manov and Anna Motkova</i>	
PTAS for the Euclidean Capacitated Vehicle Routing Problem in R^d	193
<i>Michael Khachay and Roman Dubinin</i>	
On Integer Recognition over Some Boolean Quadric Polytope Extension	206
<i>Andrei Nikolaev</i>	
Variable Neighborhood Search-Based Heuristics for Min-Power Symmetric Connectivity Problem in Wireless Networks	220
<i>Roman Plotnikov, Adil Erzin, and Nenad Mladenovic</i>	
On the Facets of Combinatorial Polytopes	233
<i>Ruslan Simanchev and Inna Urazova</i>	
A Branch and Bound Algorithm for a Fractional 0-1 Programming Problem . .	244
<i>Irina Utkina, Mikhail Batsyn, and Ekaterina Batsyna</i>	
Scheduling Problems	
Approximating Coupled-Task Scheduling Problems with Equal Exact Delays	259
<i>Alexander Ageev and Mikhail Ivanov</i>	
Routing Open Shop with Unrelated Travel Times	272
<i>Ilya Chernykh</i>	
The 2-Machine Routing Open Shop on a Triangular Transportation Network	284
<i>Ilya Chernykh and Ekaterina Lgotina</i>	
Mixed Integer Programming Approach to Multiprocessor Job Scheduling with Setup Times	298
<i>Anton V. Ereemeev and Yulia V. Kovalenko</i>	

On Speed Scaling Scheduling of Parallel Jobs with Preemption	309
<i>Alexander Kononov and Yulia Kovalenko</i>	

Facility Location

Facility Location in Unfair Competition	325
<i>Vladimir Beresnev and Andrey Melnikov</i>	
Variable Neighborhood Descent for the Capacitated Clustering Problem	336
<i>Jack Brimberg, Nenad Mladenović, Raca Todosijević,</i> <i>and Dragan Urošević</i>	
A Leader-Follower Hub Location Problem Under Fixed Markups	350
<i>Dimitrije D. Čvokić, Yury A. Kochetov, and Aleksandr V. Plyasunov</i>	
Tabu Search Approach for the Bi-Level Competitive Base Station Location Problem	364
<i>Ivan Davydov, Marceau Coupechoux, and Stefano Iellamo</i>	
Upper Bound for the Competitive Facility Location Problem with Quantile Criterion	373
<i>Andrey Melnikov and Vladimir Beresnev</i>	

Mathematical Programming

Fast Primal-Dual Gradient Method for Strongly Convex Minimization Problems with Linear Constraints	391
<i>Alexey Chernov, Pavel Dvurechensky, and Alexander Gasnikov</i>	
An Approach to Fractional Programming via D.C. Constraints Problem: Local Search	404
<i>Tatiana Gruzdeva and Alexander Strekalovsky</i>	
Partial Linearization Method for Network Equilibrium Problems with Elastic Demands	418
<i>Igor Konnov and Olga Pinyagina</i>	
Multiple Cuts in Separating Plane Algorithms.	430
<i>Evgeni Nurminski</i>	
On the Parameter Control of the Residual Method for the Correction of Improper Problems of Convex Programming	441
<i>Vladimir D. Skarin</i>	
On the Merit and Penalty Functions for the D.C. Optimization	452
<i>Alexander S. Strekalovsky</i>	

Mathematical Economics and Games

Application of Supply Function Equilibrium Model to Describe the Interaction of Generation Companies in the Electricity Market	469
<i>Natalia Aizenberg</i>	
Chain Store Against Manufacturers: Regulation Can Mitigate Market Distortion.	480
<i>Igor Bykadorov, Andrea Ellero, Stefania Funari, Sergey Kokovin, and Marina Pudova</i>	
On the Existence of Immigration Proof Partition into Countries in Multidimensional Space	494
<i>Valeriy M. Marakulin</i>	
Search of Nash Equilibrium in Quadratic n -person Game	509
<i>Ilya Minarchenko</i>	

Applications of Operational Research

Convergence of Discrete Approximations of Stochastic Programming Problems with Probabilistic Criteria.	525
<i>Andrey I. Kibzun and Sergey V. Ivanov</i>	
A Robust Leaky-LMS Algorithm for Sparse System Identification	538
<i>Cemil Turan and Yedilkhan Amirgaliev</i>	
Extended Separating Plane Algorithm and NSO-Solutions of PageRank Problem	547
<i>Evgeniya Vorontsova</i>	

Short Communications

Location, Pricing and the Problem of Apollonius	563
<i>André Berger, Alexander Grigoriev, Artem Panin, and Andrej Winokurow</i>	
Variable Neighborhood Search Approach for the Location and Design Problem	570
<i>Tatyana Levanova and Alexander Gnusarev</i>	
On a Network Equilibrium Problem with Mixed Demand	578
<i>Olga Pinyagina</i>	

Author Index	585
-------------------------------	-----

<http://www.springer.com/978-3-319-44913-5>

Discrete Optimization and Operations Research
9th International Conference, D00R 2016, Vladivostok,
Russia, September 19-23, 2016, Proceedings
Kochetov, Y.; Khachay, M.; Beresnev, V.; Nurminski, E.;
Pardalos, P.M. (Eds.)
2016, XXVI, 586 p. 58 illus., Softcover
ISBN: 978-3-319-44913-5