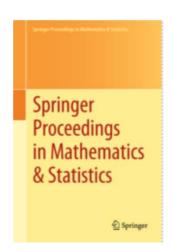
## The Seventh International Conference on Network Analysis NET 2017

June 22-24, 2017

Laboratory of Algorithms and Technologies for Network Analysis (LATNA),

National Research University Higher School of Economics, Nizhny Novgorod, Russia





Thursday, June 22

Room 402 HSE, 136 Rodionova Str.

**09:00 – 09:30** Registration

**09:30 – 09:50** Panos M. Pardalos

Data Mining and Optimization Heuristics for Massive Networks

**09:50 – 10:40** Roberto Battiti

From graphs to communities, cliques, quasi-cliques and related gangs

**10:40 – 11:00** Coffee Break

11:00 – 11:50 Nenad Mladenovic

New community detection criterion

**11:50 – 12:30** Session 1 (2 talks)

Yury Malkov

Geometric model of rich-club phenomenon in complex networks

Sergey Makrushin

Developing a model of topological structure formation for power transmission grids based on the analysis of the UNEG

12:30 – 14:00 Lunch Break

**14:00 – 14:50** George Michailidis

Regularized estimation and testing for High-Dimensional Multi-Block Vector Autoregressive Models

**14:50 – 15:10** Coffee Break

**15:10 – 16:10** Session 2 (3 talks):

Jayeeta Deshmukh

Trade credit Guarantee Networks with Frictionless Benefit

Igor Konnov

Application of market models to network equilibrium problems

Olga Pinyagina, Igor Konnov

Selective bi-coordinate variations for network equilibrium problems with mixed demand

**16:10 – 16:30** Coffee Break

**16:30 – 17:50** Session 3 (4 talks):

Alina V. Vladimirova, Alexey L. Ryabinin

Accounting for National Scientific Traditions in Bibliometric Network Analysis:

Mapping Asian and African Studies in Russia

Nataliya Matveeva

Analyzed of co-authorship networks and scientific citation based on Google Scholar Sergei Sidorov

Company Co-Mention Network Analysis

Ivan Kuznetsov

Intra-organizational networks in organizations: communication networks as a key to success

**18:00** Reception

Friday, June 23

Room 402 HSE, 136 Rodionova Str.

**09:30 – 10:20** Elena Konstantinova

Cayley networks in Computer Science

**10:20 – 10:40** Coffee Break

**10:40 – 11:30** Ludmila Prokhorenkova

Some general results on preferential attachment and clustering coefficient

**11:30 – 12:30** Session 4 (4 talks):

Sergey Slashchinin

The Properties of Optimal Portfolios for Markowitz Problem

**Dmitry Sirotkin** 

Polynomial-time solvability of the independent set problem in a certain class of subcubic planar graphs

Dmitry Taletskii

On the number of maximal independent sets in complete q-ary trees

Sergey Ketkov

Evader's models in sequential network interdiction

**12:30 – 14:00** Lunch Break

**14:00 – 14:50** Andrey Raigorodskii

Random graphs and applications

**14:50 – 15:10** Coffee Break

**15:10** – **16:15** Session 5 (3 talks):

Alexander Rubchinskiy

Decomposition Complexity of Graphs and Its Applications to Analysis of Socio-Economic Systems

Irina Utkina

*Using modular decomposition technique to solve the maximum clique problem* Dmitry Ignatov

Multimodal Clustering for Community Detection

**16:15 – 16:30** Coffee Break

**16:30 – 17:45** Session 6 (5 talks)

Ilya I. Kurochkin

The comparative analysis of big networks with various network topologies

Alexander Semenov, Stepan Kochemazov, Dmitry Gorbatenko

Computational study of activation dynamics on networks of arbitrary structure

Andrey, Nelyubin, Vladislav, Pidinovski, Mikhail, Potapov

Methods of criteria importance theory and their software implementation

Marina Ananieva

Information Propagation Strategies in Online Social Networks

Ilia Karpov

Weighting Relationship Strength in Online Social Networks

Saturday, June 24

Room 402 HSE, 136 Rodionova Str.

**09:30 – 10:20** Oleg Khamisov

Looking for an equilibrium on long-term electricity market under network constraints

**10:20 – 10:40** Coffee Break

**10:40 – 12:20** Session 4 (5 talks):

Alexander Strekalovsky

Global search in problem with d.c. constraints

Tatiana Gruzdeva

Minimization of the average production costs via fractional programming problem Mikhail Batsyn, Alexey Nikolaev

Vehicle Assignment in Site-Dependent Vehicle Routing Problems with Split Deliveries Andrei Orlov

On a Numerical Solving of Bilevel Pricing Problem in Telecommunication Networks via D.C. Maximization

**Dmitry Ignatov** 

Searching for Maximal Quasi-Bicliques via MIP-Based Models

12:20 – 14:00 Lunch Break

**14:00 – 14:50** Oleg Prokopyev

Finding Critical Links for Closeness Centrality

**14:50 – 15:10** Coffee Break

**15:10 – 16:10** Session 5 (3 talks):

Mario Rosario Guarracino

A distributed supervised learning algorithm for smart grid networks

Svetlana Kolesnikova

Application of Nonlinear Adaptation on Manifolds for Economic Objects

Ivan Grechikhin

Comparison of different methods of graphical models identification

**16:10 – 16:30** Coffee Break

**16:30 – 17:45** Session 6 (5 talks)

Maxim Demenkov

Deep neural network as a composition of polyhedral functions

Alexander Rassadin, Andrey Savchenko

Deep neural networks performance optimization via the Distillation the Knowledge Anvar Kurmukov

Modular structure of brain networks in healthy and diseased brains

Nadezhda Kostyakova

Analysing Online Recomendation Networks

**Dmitry Zaytsev** 

Mapping the ontologies, methodological approaches and methods of socio-political research: application of social network analysis