Invited Review

- [Committees: History and Applications in Machine Learning](#)
  Vladimir Mazurov and Ekaterina Polyakova

Mathematical Programming

- [Regularization and matrix correction of improper linear programming problems](#)
  Vladimir Erokhin, Sergey Sotnikov, Andrey Kadochnikov, Alexey Vaganov

- [Matrix correction of inconsistent systems of linear inequalities using the matrix l_1 norm](#)
  Olga Murav'eva

- [Discrete time Lyapunov-type convergence conditions for recurrent sequences in optimization and subgradient method for weakly convex functions](#)
  Evgeni Nurminski and Natalia Shamray

- [Methods for matrix games with mixed strategies and quantile payoff function](#)
  Leonid Popov

- [Counterexamples in the theory of α-sets](#)
  Vladimir Ushakov, Aleksandr Ershov and Maksim Pershakov

Combinatorial Optimization

- [An evolutionary based approach for the traffic lights optimization problem](#)
  Ivan Davydov and Daniil Tolstykh

- [On given diameter MST problem on random instances](#)

- *Edward Gimadi and Ekaterina Shin*

- [Variable neighborhood search for the resource constrained project scheduling problem](#)
  Evgenii Goncharov

- [The problem K-means and given J-centers: polynomial solvability in one dimension](#)
  Alexander Kelmanov and Vladimir Khandeev

- [The VNS approach for a consistent capacitated vehicle routing problem under the shift length constraints](#)
  Polina Kononova and Igor Kulachenko

- [Development of ant colony optimization algorithm for competitive p-median facility location problem with elastic demand](#)
  Tatiana Levanova and Alexander Gnusarev

- [Bounds for non-IRUP instances of Cutting Stock Problem with minimal capacity](#)
  Artem Ripatti and Vadim Kartak

- [Merging variables: one technique of search in pseudo-Boolean optimization](#)
  Alexander Semenov

- [Using Sat solvers for synchronization issues in partial deterministic automata](#)
  Hanan Shabana and Mikhail Volkov

- [A computational comparison of parallel and distributed k-median clustering algorithms on large-scale image data](#)

Anton Ushakov and Igor Vasilyev

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

Game Theory

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

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

- Simulation of flow regimes of non-isothermal liquid films
  Liudmila Prokudina and Dmitrii Bukharev

- On the problem of comparing fuzzy numbers
  Viktor Ukhobotov, Irina Stabulit and Konstantin Kudryavtsev

Integer Programming and Computational Geometry

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

- On the thinnest covering of fixed size containers with non-euclidean metric by incongruent circles
  Alexander Kazakov, Anna Lempert and Quang Mung Le

- Iterative methods for constructing approximations to optimal coverings of nonconvex polygons
  Pavel Lebedev and Vladimir Ushakov

- A generalized point-to-point approach for orthogonal transformations
  Artyom Makovetskii, Sergei Voronin, Vitaly Kober and Aleksei Voronin

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

- Analysis of integer programming model of academic load distribution
  Lidia Zaozerskaya

Operations Research and Mathematical Economics

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

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

- Social optimality in international trade under monopolistic competition
  Igor Bykadorov

- Optimization "in windows" for routing problems with constraints
  Alexander Chentsov, Alexey Grigoryev and Alexey Chentsov

- The convergecast scheduling problem on a regular triangular grid
  Adil Erzin and Roman Plotnikov

- On an applied problem of vector optimization
  Igor Kandoba and Alexander Uspenskiy

- Net present value maximization in inventory management system
  Svetlana Malakh and Vladimir Servakh

- Constructive heuristics for min-power bounded-hops symmetric connectivity problem
  Roman Plotnikov and Adil Erzin

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

- A cost minimizing at laser cutting of sheet parts on CNC machines
  Anastasia Tavaeva, Alexander Petunin, Stanislav Ukolov and Vladimir Krotov

Optimal Control and Applications

- Iterative method with exact fulfillment of constraints in optimal control problems
  Aleksandr Buldaev and Ivan Burlakov

- The stochastic coverings algorithm for solving applied optimal control problems
  Aleksander Gornov, Tatiana Zarodnyuk, Anton Anikin and Pavel Sorokovikov

- Deterministic approximation of stochastic programming problems with probabilistic constraints
  Yuri Kan and Sofia Vasil'eva

- On estimates of the solutions of inverse problems of optimal control
  Evgeniy Krupennikov

- Optimization problem in an integral model of the developing system without prehistory
  Eugeniia Markova and Inna Sidler

- A modified duality scheme for solving a 3D elastic problem with a crack
  Robert Namm and Georgiy Tsoy

- Using nonlinear interactions to control oscillations of dynamic systems
  Lev Petrov

- Risk management in Gaussian stochastic systems as an optimization problem
  Al'fiya Surina and Alexander Tyrsin

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