

**Monday, February 4**

**ROOM  $\alpha$**

Macias-Diaz Jorge Eduardo

9.30-10.20

On the solution of a Riesz space-fractional nonlinear wave equation

**ROOM  $\alpha$**

Marigonda Antonio

10.30-11.20

Introduction to Optimal Transport-1

11.20-12.00

*coffee-break*

**ROOM  $\alpha$**

Pogodaev Nikolai Il'ich

12.00-12.50

On optimal impulsive control of continuity equations

**ROOM  $\alpha$**

**Mathematical theory of optimal control and differential games**

**Chairman: Gomoyunov Mikhail Igorevich**

14.00-15.00

Staritsyn Maxim Vladimirovich

Control and relaxation of dynamic complementary systems with measures

15.00-15.20

*coffee-break*

15.20-15.40

Barbashov Timur. Numerical analysis of the solution of a parabolic equation in fractional derivatives

15.40-16.00

Zykov Igor. External estimates of reachable sets of control systems with integral constraints

16.00-16.20

Kim Inna. Stabilization of two-mass system by static output feedback

16.30-16.50

Romanenko Artur. Numerical solution of parabolic optimal control problem with derivative of fractional order in time

16.50-17.10

Parshikov Andrey. Simulation of low-altitude flight in relief rounding mode

17.10-17.30

Yurovskikh Polina. About information set calculation in multi-step systems



**Monday, February 4**

**ROOM  $\delta$**  Kazarin Lev Sergeevich

12.00-12.50 Groups. Factorizations and structure of groups. Some applications

**ROOM  $\delta$**  **Algebra and Discrete Mathematics**

**Chairman: Maslova Natalia Vladimirovna**

14.00-15.00 Makhnev Aleksandr Alekseevich

Nonexistence of some distance-regular graphs

15.00-15.20 *coffee break*

15.20-15.45 Khramova Antonina. On the Existence of Solvable Hall Subgroups

15.45-16.10 Korotitskiy Konstantin. Maximum solvable subgroups of odd index in symmetric groups

16.10-16.35 Vasilev Alexey. On normalizers of Sylow subgroups in the classical groups

16.35-16.45 *break*

16.45-17.10 Shabana Hanan. Careful Synchronization of nondeterministic automata

17.10-17.35 Zinov'eva M. On non-isomorphic finite non-abelian simple groups whose Gruenberg-Kegel graphs coincide

**Tuesday, February 5**

- ROOM  $\alpha$**  Vigeral Guillaume  
9.30-10.20 Introduction to zero-sum stochastic games
- ROOM  $\alpha$**  Marigonda Antonio  
10.30-11.20 Introduction to Optimal Transport-2  
11.20-12.00 *coffee-break*
- ROOM  $\alpha$**  Macias-Diaz Jorge Eduardo  
12.00-12.50 Nonlinear supratransmission in fractional wave systems
- ROOM  $\alpha$**  **Nonlinear partial differential equations: qualitative theory and numerical methods. Chairman: Kovalevsky Alexander Albertovich**
- 14.00-14.20 Agapov Sergey. On global solutions of certain quasilinear systems of PDEs.
- 14.20-14.40 Baranovskii Evgenii, Domnich Anastasia. On a model of non-uniformly heated viscous flows through a bounded domain
- 14.40-15.00 Markov Pavel. Classes of difference schemes for the non-linear Rapoport-Leas equation of two-phase filtration with the possibility of numerical solutions generation using continuous symmetry groups
- 15.00-15.20 *coffee-break*
- 15.20-15.40 Mukminov Timur. The example of the chain of embedded submodels for the 5-dimensional subalgebra containing operators of time translation, transfer, Galilean transfer, rotation around an axis and extension
- 15.40-16.00 Siraeva Dilara. Classification of rank 2 invariant submodels of ideal hydrodynamics
- 16.00-16.20 Matskovskiy Andrey. Interference head wave in the problem of wave diffraction from a point source by a boundary with positive effective curvature
- 16.20-16.40 Zavorokhin German, Matskovskiy Andrey. Numerical study of the analytical structure of solutions of a dispersion equation in the problem of wave diffraction from a point source located on the boundary with positive effective curvature
- 16.50-17.10 Hadur Makhmud. Indirect numerical method for functional delay differential equations with time fractional derivative
- 17.10-17.30 Mohammad Ibrahim. Direct numerical discntization for fractional differental equations with functional delay



**Tuesday, February 5**

**ROOM  $\delta$**

Konstantinova Elena Valentinovna

10.30-11.20

Integral graphs: how to get them? -1

11.20-12.00

*coffee-break*

**ROOM  $\delta$**

Kazarin Lev Sergeevich

12.00-12.50

Nilpotent algebras. Nearrings, codes and cryptographical problems

**ROOM  $\delta$**

**Algebra and Discrete Mathematics**

**Chairman: Maslova Natalia Vladimirovna**

14.00-15.00

Krotov Denis Stanislavovich.

Latin hypercubes -1

15.00-15.20

*coffee-break*

15.20-15.45

Makhnev Aleksandr Alekseevich. Automorphisms of distance-regular graph with inter-section array  $\{nm-1, nm-n+m-1, n-m+1; 1, 1, nm-n+m-1\}$

15.45-16.10

Bespalov Evgeny. On the equitable partitions of the Doob graphs with parameters  $(m, 5m, 3m, 3m)$

16.10-16.35

Tsiovkina Ludmila. On the prime spectrum of the automorphism group of an  $AT_4(p, p+2, r)$ -graph

16.35-16.50

Valuzhenich Alexandr Andreevich.. On the minimum supports of eigenfunctions of the Star graph

16.50-17.00

*Break*

17.00-17.50

Kabanov Vladislav Vladimirovich. Eigenvalues of Caley graphs

## Wednesday, February 6

### **ROOM $\alpha$**

Macias-Diaz Jorge Eduardo

10.30-11.20

Algorithm for some anomalously diffusive hyperbolic systems

11.20-12.00

*coffee-break*

### **ROOM $\alpha$**

Vigeral Guillaume

12.00-12.50

Introduction to zero-sum stochastic games-2

### **ROOM $\alpha$**

**Mathematical programming, ill-posed problems and data analysis.**

**Chairman: Khachay Mikhail Yur'evich**

14.00-15.00

Khachay Mikhail Yur'evich.

TBA

15.00-15.20

*coffee-break*

15.20-15.40

Chistyakov Pavel. Mathematical modeling of methods for solving inverse problems of atmospheric sounding

15.40-16.00

Ershova Anna. On the solution of the inverse boundary value problem for composite materials

16.00-16.20

Ketkov Sergey. About one algorithm for a fractional optimization problem

16.20-16.40

Korotkova Yuliya. The Problem of optimal management of Flight Schedule to Minimize flight departure delays.

16.40-17.00

Ogorodnikov Yurii. Approximation schemes for Vehicle Routing Problem with Time Windows

17.00-17.20

Sabanov Maxim. Algorithm for converting the graph of the railway network to a regular form

17.20-17.40

Spiridonov Arseniy. Kumkov Sergey S, Formation of non-conflict merging of aircraft flows under given schedule of their arrival

17.40-18.00

Titov Alexander. Mirror Descent and Constrained Online Optimization Problems



**Wednesday, February 6**

**ROOM  $\delta$**

9.30-10.20 Patrakeev Mikhail Aleksandrovich  
Method of elementary submodels-1

**ROOM  $\delta$**

10.30-11.20 Patrakeev Mikhail Aleksandrovich  
Method of elementary submodels-2

11.20-12.00 *coffee-break*

**ROOM  $\delta$**

Kazarin Lev Sergeevich  
12.00-12.50 Simply reducible groups and so on

**ROOM  $\delta$**

**Algebra and Discrete Mathematics**

**Chairman: Maslova Natalia Vladimirovna**

14.00-15.00 Konstantinova Elena Valentinovna  
Integral graphs: how to get them? -2

15.00-15.20 *coffee-break*

15.20-15.45 Kitov Nikita. Identities in Kaufman monoid  $K_4$

15.45-16.10 Lu L. Structural theorem for gr-injective modules over gr-noetherian G-graded commutative rings and the gr-Bass numbers

16.10-16.35 Sidorov Vadim. Automorphisms of the lattice of subalgebras (with unity) of the semiring of polynomials in one variable with max-addition over the semifield of nonnegative real numbers with max-addition

16.35-16.50 *break*

16.50-17.15 Minigulov Nicolay. Finite 4-primary almost simple groups with connected Gruenberg-Kegel graphs

17.15-18.00 Shlyopkin Alexey. Periodic groups saturated with finite simple groups of Lie type of rank 1 and groups  $\text{PSL}(3, 2^n)$

**Thursday, February 7**

- ROOM  $\alpha$**  Marigonda Antonio  
9.30-10.20 Introduction to Optimal Transport-3
- ROOM  $\alpha$**  Vigeral Guillaume  
10.30-11.20 Introduction to zero-sum stochastic games-3  
11.20-12.00 *coffee-break*
- ROOM  $\alpha$**  Macias-Diaz Jorge Eduardo  
12.00-12.50 A Riesz space-fractional Klein-Gordon-Zakharov system
- ROOM  $\alpha$**  **Theory of functions. Chairman: Akopyan Roman Razmikovich**
- 14.00-14.20 Torgashova Anastasiya. One-sided weighted approximation in  $L$  of the characteristic function of a symmetric interval by algebraic polynomials
- 14.20-14.40 Bayramov Emir. CHEBYSHEV'S PROBLEM ABOUT POLYNOMIALS, LEAST DEVIATING FROM ZERO ON THE "CROSS" OF THE COMPLEX PLANE
- 14.40-15.00 Nikiforova Tatyana. Polynomials least deviating from zero on an ellipse
- 15.00-15.20 *coffee-break*
- 15.20-15.40 Goryacheva Yulia. Turán type inequality for the integral norm on the boundary of a compact domain
- 15.40-16.00 Payuchenko Nikita Slavich. Weak-type Markov inequality on the segment
- 16.00-16.20 Seleznev Anton. The best  $L_2$ -continuation of algebraic polynomials from a unit circle to a circle of larger radius
- 16.30-16.50 Leont'eva Anastasia. Bernstein - Szeg\H{o} inequality for zero order derivative of trigonometric polynomials in the space  $L_0$
- 16.50-17.10 Berestova Ekaterina. Plancherel-Polya inequality for entire functions of exponential type in  $L^2(\mathbb{R}^n)$
- 17.10-17.30 Gridnev Maxim. Behavior of the Fourier series of functions with a restriction on the fractality of their graphs
- 17.30-17.50 Yamkovoii Dmitry. Harmonic interpolating wavelets in the Neumann boundary value problem

**Thursday, February 7**

**ROOM  $\delta$**

Solov'eva Faina Ivanovna.

9.30-10.20

Switchings for codes and designs

**ROOM  $\delta$**

Patrakeev Mikhail Aleksandrovich

10.30-11.20

Method of elementary submodels-3

11.20-12.00

*coffee-break*

**ROOM  $\delta$**

Patrakeev Mikhail Aleksandrovich

12.00-12.50

Method of elementary submodels-4

**ROOM  $\delta$**

**Algebra and Discrete Mathematics**

**Chairman: Maslova Natalia Vladimirovna**

14.00-15.00

Krotov Denis Stanislavovich.

Latin hypercubes -2

15.00-15.20

*coffee-break*

15.20-15.45

Litichevsky Dmitry. List decoding of wavelet codes

15.45-16.10

***Welcome to submit an additional talk!***

**Friday, February 8**

**ROOM  $\alpha$**  Marigonda Antonio

9.30-10.20 Introduction to Optimal Transport-4

**ROOM  $\alpha$**  Macias-Diaz Jorge Eduardo

10.30-11.20 A bounded and efficient scheme for multidimensional problems

11.20-12.00 *coffee-break*

**ROOM  $\alpha$**  Bakhterev Mikhail Olegovich.

12.00-12.50 Selected etudes in applied category theory

**Friday, February 8**

**ROOM  $\delta$**

9.30-10.20 Patrakeev Mikhail Aleksandrovich  
Method of elementary submodels-5

**ROOM  $\delta$**

10.30-11.20 Patrakeev Mikhail Aleksandrovich  
Method of elementary submodels-6

**ROOM  $\delta$**

**Theory of probability and random processes.  
Chairman: Averboukh Yurii Vladimirovich**

14.00-14.20 Berezin Anton. Markov model for a dynamic system on a network

14.20-14.40 Sherstobitova Anna. The duration of the sequential procedure for estimating the parameters of autoregressive model

14.40-15.00 Mosyagin Vyacheslav, Shvemler Natalya. Learning Stochastic Recurrent Networks with jump point of a density

15.00-15.20 *coffee-break*

15.20-15.40 Abramova Ekaterina. Analysis of the impact of environmental effects on the coexistence model of two populations

15.40-16.00 Belyaev Alexander. Stochastic piecewise smooth model of population dynamics

16.00-16.20 Derbenev Igor. Comparison of approaches to deriving equations for probabilistic characteristics of random processes with jumps

16.20-16.40 Kolinichenko Alexander. Pattern sensitivity analysis in distributed models with diffusion

16.40-17.00 *break*

17.00-17.20 Nasyrova Venera. Analysis of stochastic excitability in a two-dimensional discrete model with discontinuous function

17.20-17.40 Slepukhina Evdokia. Stochastic deformation of toroidal bursting in neuron model

17.40-18.00 Zaitseva Svetlana. Analysis of multimodal stochastic oscillations in biochemical reaction model

