

PROGRAM

THE 9TH INTERNATIONAL SCHOOL-SEMINAR

NLA 2026

NONLINEAR ANALYSIS AND EXTREMAL PROBLEMS

June 22-26, 2026 Irkutsk, Russia

Venue

Matrosov Institute for System Dynamics and Control Theory SB RAS
134 Lermontov St., Irkutsk, Russia

Website

<https://conference.icc.ru/event/11/>

Organizers



Matrosov Institute for System Dynamics and Control Theory SB RAS



Novosibirsk State University



Krasovskii Institute of Mathematics and Mechanics UB RAS



Irkutsk State University



Mathematical Center in Akademgorodok

The School-Seminar is supported by the Mathematical Center in Akademgorodok under agreement No. 075-15-2025-349 with the Ministry of Science and Higher Education of the Russian Federation.

VISUAL KEY

Scientific Tracks

- Partial Differential Equations
- Dynamical Systems
- Nonlinear Analysis and Its Applications
- Calculus of Variations and Mathematical Control Theory
- Optimization
- Numerical Methods

PROGRAM STATISTICS

At a glance

165

PRESENTATIONS

8

LECTURES

3

PLENARY TALKS

24

BLOCKS

46

CITIES

13

COUNTRIES

Formats: 74 on-site, 90 online. Data are recalculated automatically at build time.

Lecture Courses and Plenary Talks

LECTURER

Stanislav Shaposhnikov

Lomonosov Moscow State University, Moscow, Russia

Fokker-Planck-Kolmogorov Equations: Changes of Coordinates

LECTURER

Mikhail Gomoyunov

Krasovskii Institute of Mathematics and Mechanics UB RAS, Yekaterinburg, Russia

Minimax and Viscosity Solutions of Path-Dependent Hamilton-Jacobi Equations

LECTURER

Hu Guang-Da

Department of Mathematics, Shanghai University, Shanghai, China

Difference Stabilizing Controller of Linear Delay Systems

LECTURER

Li Shuguang

School of Science, Dalian Maritime University, Dalian, China

Higher-Order Compact Difference Methods for Nonlinear Dispersive Wave Equations

LECTURER

Liang Hui

School of Science, Harbin Institute of Technology, Shenzhen, China

Compatibility of Collocation Error Analyses for Volterra Integral Equations with Smooth and Weakly Singular Kernels

LECTURER

Vassili Kolokoltsov

Lomonosov Moscow State University, Moscow, Russia

Intrinsic Derivatives, Interacting Particles and the Propagation of Chaos

Program at a Glance

All times are local time in Irkutsk.

Monday June 22	Tuesday June 23	Wednesday June 24	Thursday June 25	Friday June 26
<p>09:00-10:00 Registration</p> <p>10:00-10:15 Opening Ceremony Room A ONLINE PROJECTOR SOUND</p> <p>10:15</p> <p>Room A ONLINE PROJECTOR SOUND Lecture Courses 10:15-12:40</p> <p>11:15-11:30 Coffee Break</p> <p>12:30-14:00 Lunch</p> <p>14:00</p> <p>Room A ONLINE PROJECTOR SOUND Lecture Course / Invited Talk 14:00-15:00</p> <p>Room B ONLINE PROJECTOR Dynamical Systems 1 14:00-17:20</p> <p>Room C ONLINE PROJECTOR Optimization 1 14:00-17:20</p> <p>Room D ONLINE PROJECTOR Nonlinear Analysis and Its Applications 1 14:00-17:20</p> <p>15:00-15:20 Coffee Break</p> <p>15:20</p> <p>Room A ONLINE PROJECTOR SOUND Partial Differential Equations 1 15:20-17:20</p> <p>17:30-20:00 Welcome Reception</p>	<p>09:00</p> <p>Room A ONLINE PROJECTOR SOUND Lecture Courses 09:00-12:30</p> <p>10:00-10:15 Coffee Break</p> <p>11:15-11:30 Coffee Break</p> <p>12:30-14:00 Lunch</p> <p>14:00</p> <p>Room A ONLINE PROJECTOR SOUND Lecture Courses 14:00-15:00</p> <p>Room B ONLINE PROJECTOR Calculus of Variations and Mathematical Control Theory 1 14:00-18:00</p> <p>Room C ONLINE PROJECTOR Numerical Methods 1 14:00-18:20</p> <p>Room D ONLINE PROJECTOR Dynamical Systems 2 14:00-18:20</p> <p>15:00-15:20 Coffee Break</p> <p>15:20</p> <p>Room A ONLINE PROJECTOR SOUND Partial Differential Equations 2 15:20-18:20</p>	<p>09:00</p> <p>Room A ONLINE PROJECTOR SOUND Lecture Courses 09:00-12:30</p> <p>10:00-10:15 Coffee Break</p> <p>11:15-11:30 Coffee Break</p> <p>12:30-14:00 Lunch</p> <p>14:00</p> <p>Room A ONLINE PROJECTOR SOUND Lecture Course / Invited Talk 14:00-15:00</p> <p>Room C ONLINE PROJECTOR Partial Differential Equations 3 14:00-18:20</p> <p>Room D ONLINE PROJECTOR Calculus of Variations and Mathematical Control Theory 2 14:00-18:00</p> <p>15:00-15:20 Coffee Break</p> <p>15:20</p> <p>Room A ONLINE PROJECTOR SOUND Nonlinear Analysis and Its Applications 2 15:20-18:00</p> <p>Room B ONLINE PROJECTOR Dynamical Systems 3 15:20-18:20</p>		<p>09:00</p> <p>Room A ONLINE PROJECTOR SOUND Student Section: Nonlinear Analysis and Extremal Problems 09:00-10:00</p> <p>09:40-10:00 Coffee Break</p> <p>10:00</p> <p>Room A ONLINE PROJECTOR SOUND Partial Differential Equations 4 10:00-12:20</p> <p>Room B ONLINE PROJECTOR Numerical Methods 2 10:00-12:00</p> <p>Room C ONLINE PROJECTOR Calculus of Variations and Mathematical Control Theory 3 10:00-12:40</p> <p>12:30-14:00 Lunch</p> <p>14:00</p> <p>Room A ONLINE PROJECTOR SOUND Optimization 2 14:00-15:40</p> <p>Room B ONLINE PROJECTOR Dynamical Systems 4 14:00-15:40</p> <p>16:00-16:30 Closing Ceremony Room A ONLINE PROJECTOR SOUND</p>

Detailed Program

165 active presentations.

CONFERENCE DAY 1

June 22, Monday

09:00-10:00 Registration	10:00-10:15 Opening Ceremony Room A ONLINE PROJECTOR SOUND	11:15-11:30 Coffee Break
12:30-14:00 Lunch	15:00-15:20 Coffee Break	17:30-20:00 Welcome Reception

10:15-12:40 **ROOM A** [ONLINE](#) [PROJECTOR](#) [SOUND](#)

Lecture Courses

CHAIR: Alexander Tolstonogov
SECRETARY: Anton Anikin

10:15 **Guang-Da Hu**
11:15
Difference Stabilizing Controller of Linear Delay Systems. Lecture 1
Department of Mathematics, Shanghai University, Shanghai, China
[ON-SITE](#)

11:30 **Guang-Da Hu**
12:30
Difference Stabilizing Controller of Linear Delay Systems. Lecture 2
Department of Mathematics, Shanghai University, Shanghai, China
[ON-SITE](#)

12:30 **Nla-2026**
12:40
Collective Photo

14:00-15:00 **ROOM A** [ONLINE](#) [PROJECTOR](#) [SOUND](#)

Lecture Course / Invited Talk

CHAIR: Alexander Strelakovsky
SECRETARY: Elena Chistyakova

14:00 **Vassili Kolokoltsov**
15:00
Intrinsic Derivatives, Interacting Particles and the Propagation of Chaos
Lomonosov Moscow State University, Moscow, Russia
[ON-SITE](#)

14:00-17:20 **ROOM B** [ONLINE](#) [PROJECTOR](#) **DYNAMICS**

Dynamical Systems 1

CHAIR: Alla Shcheglova
SECRETARY: Liubov Solovarova

14:00 **Sergey Shorokhov**
14:20
Construction of Neural Differential Equations by Given Trajectory Points
Peoples' Friendship University of Russia named after Patrice Lumumba, Moscow, Russia
[ONLINE](#)

14:20 **Julia Belyaeva**
14:40
Nonlinear Stability for the Vlasov-Poisson Equations
RUDN, Moscow, Russia
[ONLINE](#)

14:40 **Zhavohir Mamatov**
15:00
Solvability of Boundary Value Problems for Multidimensional Ultraparabolic Equations of the Fourth Order
Novosibirsk State University, Novosibirsk, Russia
[ONLINE](#)

15:20 **Pavel Kuznetsov**
15:40
Biological Wave Solutions in the Bacillus Subtilis Chemotaxis Model
Matrosov Institute for System Dynamics and Control Theory SB RAS, Irkutsk, Russia
[ON-SITE](#)

15:40 **Alla Shcheglova**
16:00
Detectability of Time-Varying Differential-Algebraic Equations with Scalar Output
Matrosov Institute for System Dynamics and Control Theory SB RAS, Irkutsk, Russia
[ON-SITE](#)

16:00 **Yuliya Kokonova, Svetlana Solodusha**
16:20
A Problem of Identifying Input Signals of Dynamical Systems Modelled by Volterra Polynomials
Irkutsk National Research Technical University, Irkutsk, Russia; Melentiev Energy Systems Institute SB RAS, Irkutsk, Russia
[ON-SITE](#)

16:20 **Natalia Yaparova, Svetlana Solodusha**
16:40
Numerical Method for Solving the Inverse Heat Conduction Problem under Uncertainty
South Ural State University (National Research University), Chelyabinsk, Russia; Irkutsk State University, Irkutsk, Russia
[ON-SITE](#)

16:40 **Sergey Fedorov, Alexander Kozlov**
17:00
Guaranteeing Domain for Instrumental Errors of a Strapdown Inertial Navigation System Moving Along the Equator
Navigation and Control Lab, Lomonosov Moscow State University, Moscow, Russia
[ON-SITE](#)

17:00 **Stepan Pavlov**
17:20
Variational Problems of Nonlinear Elasticity on Carnot Groups
Novosibirsk State University, Novosibirsk, Russia
[ON-SITE](#)

14:00-17:20 **ROOM C** [ONLINE](#) **PROJECTOR** **OPTIMIZATION**

Optimization 1

CHAIR: Vsevolod Voronov

SECRETARY: Mariya Barkova

14:00 **Igor Zabolin, Oksana Shulgina, Rashid Yarullin**
14:20
Implementing Multicriteria Optimization Method via Cutting Procedures
Kazan (Volga Region) Federal University, Kazan, Russia
[ONLINE](#)

14:20 **Akmal Mamatov**
14:40
Algorithms for Constructing an Optimal Strategy for the First Player on a Segment and a Polygon in a Linear Game Problem with Forbidden Situations
Samarkand State University named after Sh. Rashidov, Samarkand, Uzbekistan
[ONLINE](#)

14:40 **Irina Pototskaya, Yulia Pupysheva**
15:00
Expenditure Optimized Control of Small Motions of Mechanical Systems
St. Petersburg State University, St. Petersburg, Russia
[ONLINE](#)

15:20 **Boris Melnikov, Mikhail Abramyan, Elena Melnikova**
15:40
Some Extremal Problems for Minimizing Nondeterministic Finite Automata
Shenzhen MSU-BIT University, Shenzhen, China; Southern Federal University, Rostov-on-Don, Russia; Russian State Social University, Moscow, Russia
[ON-SITE](#)

15:40 Svetlana Gakh, Oleg Khamisov
16:00
On the Search for Equilibrium in the ORIRES Market Model
Melentiev Energy Systems Institute SB RAS, Irkutsk, Russia
[ON-SITE](#)

16:00 Ilya Minarchenko, Oleg Khamisov
16:20
Solving Nonconvex Quadratic Programming Problems Using a Branch and Bound Method with Inner and Outer Box Approximations
Melentiev Energy Systems Institute SB RAS, Irkutsk, Russia
[ON-SITE](#)

16:20 Vsevolod Voronov
16:40
An Algorithm for Finding Suboptimal Configurations in the Generalized Min-Max Ratio Problem
Caucasus Mathematical Center of Adyghe State University, Maikop, Russia; Moscow Institute of Physics and Technology, Dolgoprudny, Russia
[ON-SITE](#)

16:40 Vyacheslav Belousov
17:00
Reduction of the Problem of Constructing the Lyapunov Matrix to a Fredholm Equation
St. Petersburg State University, St. Petersburg, Russia
[ON-SITE](#)

17:00 Ekaterina Tserfus
17:20
Optimal Control of an Age-Structured Population with Time-Delay Effects
Institute of Mathematics and Information Technologies, Irkutsk State University, Irkutsk, Russia
[ON-SITE](#)

14:00-17:20 ROOM D [ONLINE](#) PROJECTOR **NONLINEAR ANALYSIS**

Nonlinear Analysis and Its Applications 1

CHAIR: Pavel Petrenko

SECRETARY: Anton Anikin

14:00 Yuriy Sachkov, A. Pechen, B. Volkov, F. Sorokin
14:20
Time-Optimal Problem for Schrödinger Equation
Program Systems Institute, Pereslavl-Zalessky, Russia; Steklov Mathematical Institute, Moscow, Russia
[ONLINE](#)

14:20 Oleg Morzhin
14:40
On Optimization for Obtaining Two-Qubit Gates under Unitary Dynamics with Controls Formed with Chebyshev Polynomials
Steklov Mathematical Institute of the Russian Academy of Sciences, Department of Mathematical Methods for Quantum Technologies, Moscow, Russia
[ONLINE](#)

14:40 Valery Vasil'ev
15:00
Quadratic Core of a Cooperative Game: Vertexes of the Recessive Cone Section
Sobolev Institute of Mathematics, Novosibirsk, Russia
[ONLINE](#)

15:20 Andrey Osipov
15:40
On Solving Some Operator Equations by Using Related Block Band Operators and Continued Fractions
Scientific Research Institute for System Analysis of the National Research Centre "Kurchatov Institute" (NRC "Kurchatov Institute" - SRISA), Moscow, Russia
[ONLINE](#)

15:40 Olga Pochinka
16:00
On Structural Stability of 3-Diffeomorphisms with the Smale Solenoid Attractor-Repeller Dynamics
HSE University, Nizhny Novgorod, Russia
[ONLINE](#)

16:00 Aleksei Lozovoi, Alexey Tikhonov
16:20
On the Modified Method of Complex Autonomization and Its Application to Beletsky Equation
St. Petersburg State University, St. Petersburg, Russia
[ONLINE](#)

16:20

Polina Korneva

16:40

On the Periodic Problem for Some Classes of Differential Variational Inequalities

Voronezh State Pedagogical University, Voronezh, Russia

[ONLINE](#)

16:40

Elena Panasenکو, Aleksandra Zamurueva

17:00

On a Comparison Method for Studying the Existence of Solutions to Operator Equations in Vector Metric Spaces

Derzhavin Tambov State University, Tambov, Russia

[ONLINE](#)

17:00

Natalia Manakova, Nadezhda Nikolaeva

17:20

Investigation of the Structure of the Phase Manifold of One Sobolev-Type Equation

South Ural State University (National Research University), Chelyabinsk, Russia

[ONLINE](#)

15:20-17:20

ROOM A

[ONLINE](#) [PROJECTOR](#) [SOUND](#)

PDE

Partial Differential Equations 1

CHAIR:

Alexander Kazakov

SECRETARY:

Maksim Zharkov

15:20

Alexander Kazakov, Lev Spevak

15:40

Analytical and Numerical Solutions with Zero Fronts to a Degenerate Parabolic Predator-Prey System

Matrosov Institute for System Dynamics and Control Theory SB RAS, Irkutsk, Russia; Institute of Engineering Science of UB RAS, Ekaterinburg, Russia

ON-SITE

15:40

Kristina Ivleva

16:00

On Mixed Boundary Value Problems in the Quarter-Plane for the Vlasov System

Novosibirsk State University, Novosibirsk, Russia

ON-SITE

16:00

Danil Sboev

16:20

Composition Operators on Sobolev Spaces in Metric Measure Spaces

Novosibirsk State University, Novosibirsk, Russia

ON-SITE

16:20

Alexandr Demidov

16:40

Vekua's Formula and the Construction of Eigenfunctions and Eigenvalues of the Laplace Operator

Lomonosov Moscow State University, Moscow, Russia

[ONLINE](#)

16:40

Viktor Korzyuk, Jan Rudzko

17:00

Classical Solution to the Second Mixed Problem for a Semilinear Wave Equation with a Dirac Potential

Belarusian State University, Minsk, Belarus; Institute of Mathematics of the National Academy of Sciences of Belarus, Minsk, Belarus

[ONLINE](#)

17:00

Yulia Koroleva, Alexander Korolev

17:20

On the Electro-Hydrodynamical Boundary Value Problem for the Unit Cell of Cation-Exchange Membrane

Tikhinov Moscow Institute of Electronics and Mathematics, HSE, Moscow, Russia

[ONLINE](#)

June 23, Tuesday

10:00-10:15 Coffee Break	11:15-11:30 Coffee Break	12:30-14:00 Lunch
15:00-15:20 Coffee Break		

09:00-12:30 ROOM A [ONLINE](#) [PROJECTOR](#) [SOUND](#)

Lecture Courses

CHAIR: Alexander Gornov
SECRETARY: Maksim Staritsyn

09:00
10:00
Stanislav Shaposhnikov
Fokker-Planck-Kolmogorov Equations: Changes of Coordinates. Lecture 1
 Moscow State University; Moscow; Russia
[ON-SITE](#)

10:15
11:15
Stanislav Shaposhnikov
Fokker-Planck-Kolmogorov Equations: Changes of Coordinates. Lecture 2
 Lomonosov Moscow State University, Moscow, Russia
[ON-SITE](#)

11:30
12:30
Mikhail Gomoyunov
Minimax and Viscosity Solutions of Path-Dependent Hamilton-Jacobi Equations. Lecture 1
 Krasovskii Institute of Mathematics and Mechanics UB RAS, Ekaterinburg, Russia
[ON-SITE](#)

14:00-15:00 ROOM A [ONLINE](#) [PROJECTOR](#) [SOUND](#)

Lecture Courses

CHAIR: Alexander Tolstonogov
SECRETARY: Maksim Staritsyn

14:00
15:00
Mikhail Gomoyunov
Minimax and Viscosity Solutions of Path-Dependent Hamilton-Jacobi Equations. Lecture 2
 Krasovskii Institute of Mathematics and Mechanics UB RAS, Ekaterinburg, Russia
[ON-SITE](#)

14:00-18:00 ROOM B [ONLINE](#) [PROJECTOR](#) **CONTROL THEORY**

Calculus of Variations and Mathematical Control Theory 1

CHAIR: Dmitry Khlopin
SECRETARY: Olga Samsonyuk

14:00
14:20
Tatiana Filippova, Oxana Matviychuk
Reachable Set Estimates for Impulsive Control Systems with Uncertain Initial State and Cone Constraint on Controls
 Krasovskii Institute of Mathematics and Mechanics UB RAS, Ekaterinburg, Russia
[ONLINE](#)

14:20
14:40
Maria Soroka, Garik Petrosyan
On the Controllability Problem for Systems of Impulsive Functional Inclusions
 Voronezh State University, Voronezh, Russia
[ONLINE](#)

- 14:40**
15:00
Garik Petrosyan, Maria Soroka
On Feedback Control Systems Governed by Functional Inclusions with Causal Operators and a Sweeping Process
Voronezh State University, Voronezh, Russia
[ONLINE](#)
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- 15:20**
15:40
Dmitry Khlopin
On Markov Property for Any Solution of Nonlocal Continuity Equation
Krasovskii Institute of Mathematics and Mechanics UB RAS, Ekaterinburg, Russia
[ON-SITE](#)
-
- 15:40**
16:00
Alexander Chentsov, Dmitrii Serkov
On the Design of a Control Scheme with a Guide under Conditions of Uniqueness and Uniform Boundedness of Trajectories Generated by Control Measures
Krasovskii Institute of Mathematics and Mechanics UB RAS, Ekaterinburg, Russia; Ural Federal University, Ekaterinburg, Russia
[ONLINE](#)
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- 16:00**
16:20
Elena Goncharova, Nikolay Pogodaev, Olga Samsonyuk, Maksim Staritsyn
Infinite-Order Variational Analysis of Optimal Control Problems on Banach Spaces
Matrosov Institute for System Dynamics and Control Theory SB RAS, Irkutsk, Russia; Irkutsk National Research Technical University, Irkutsk, Russia
[ON-SITE](#)
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- 16:20**
16:40
Victor Tolstykh
Optimality Conditions and Optimization Algorithms in Infinite-Dimensional Spaces
Donetsk State University, Donetsk, Russia
[ONLINE](#)
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- 16:40**
17:00
Igor Petrov
Pareto Front Construction in a Two-Criteria Optimal Control Problem
Institute of Mathematics and Information Technologies, Irkutsk State University, Irkutsk, Russia
[ON-SITE](#)
-
- 17:00**
17:20
Mikhail Gusev
Duality of Convex Sets and Smoothness of the Boundary of the Reachable Set with Control Constraints in L_p
Krasovskii Institute of Mathematics and Mechanics, Ekaterinburg, Russia
[ONLINE](#)
-
- 17:20**
17:40
Boris Ananyev
Observation Problem on Part of Coordinates under Integral Constraints
Krasovskii Institute of Mathematics and Mechanics UB RAS, Ekaterinburg, Russia
[ONLINE](#)
-
- 17:40**
18:00
Evgeniy Krupennikov, Nina Subbotina
To the Control Reconstruction Problem for Systems Non-Linear in Controls
Krasovskii Institute of Mathematics and Mechanics UB RAS, Ekaterinburg, Russia; Ural Federal University, Ekaterinburg, Russia
[ONLINE](#)

14:00-18:20 **ROOM C** [ONLINE](#) **PROJECTOR** **NUMERICAL METHODS**

Numerical Methods 1

CHAIR: Alexander Gornov

SECRETARIES: Anton Anikin, Pavel Sorokovikov

14:00
14:20
Artem Shurygin, Alexander Devyatitsilny
High-Order Robust Numerical Differentiation in Motion Determination Problems
IACP FEB RAS, Vladivostok, Russia
[ONLINE](#)

14:20
14:40
Sergey Glukhov
The Problem of Selecting the Optimal Pressure at an Oil and Gas Field Using the Katz Method
Ufa University of Science and Technology, Ufa, Russia
[ONLINE](#)

- 14:40** **Aygul Mukhutdinova**
15:00
Study of the Oscillatory Flow Regime of a Surfactant Solution in an Annular Channel
Mavlyutov Institute of Mechanics UFRC RAS, Ufa, Russia
[ONLINE](#)
-
- 15:20** **Alexander Gornov, Anton Anikin, Pavel Sorokovikov**
15:40
Methods of Landscape Analysis of Multiextremal Functions and Applications
Matrosov Institute for System Dynamics and Control Theory SB RAS, Irkutsk, Russia
[ONLINE](#)
-
- 15:40** **Aleksandr Rozhkov**
16:00
A Method for Searching Polynomial Coefficients Using a Pseudorandom Number Generator in the Inverse Problem for the Grad-Shafranov Equation
National Research Moscow State University of Civil Engineering, Moscow, Russia
[ONLINE](#)
-
- 16:20** **Yunus Soliev**
16:40
On Cubature Formulas for Multidimensional Singular Integrals with a Cauchy Kernel
MADI, MTUCI, Moscow, Russia
[ONLINE](#)
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- 16:40** **Maksim Minin**
17:00
Optimisation of Spatial Hashing Parameters for Neighbour Search in Particle Systems
Saint Petersburg State Marine Technical University, Saint Petersburg, Russia
[ONLINE](#)
-
- 17:00** **Aleksandr Stepanov**
17:20
On the Selection of a Prior Distribution for Bayesian Estimation of a Measurand Near Natural Limits
Mendeleyev Institute for Metrology, St. Petersburg, Russia
[ONLINE](#)
-
- 17:20** **Eugene Parmuzin, Valery Agoshkov, Natalia Lezina**
17:40
Variational Data Assimilation of Sea Surface Temperature for the Black Sea Hydrothermodynamics Model
Marchuk Institute of Numerical Mathematics, Russian Academy of Sciences, Moscow, Russia; Faculty of Computational Mathematics and Cybernetics, Lomonosov Moscow State University, Moscow, Russia
[ONLINE](#)
-
- 17:40** **Innocent Ofia, Evgeny Cherkashin, Tatiana Cherkashina, Vadim Pellinen**
18:00
A Hybrid PCA-NN-Kriging Framework for Geochemical Mapping: Distinguishing Natural from Anthropogenic Controls Using Multi-Element Data
Siberian School of Geosciences, Irkutsk National Research Technical University, Irkutsk, Russia; School of Mathematics and Information Sciences, Yantai University, Yantai, China; Matrosov Institute for System Dynamics and Control Theory SB RAS, Irkutsk, Russia; Institute of the Earth's Crust SB RAS, Irkutsk, Russia
[ONLINE](#)
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- 18:00** **Nadezhda Maltugueva**
18:20
Optimal Switching Control of Linear Systems via Mixed-Integer Linear Programming
Matrosov Institute for System Dynamics and Control Theory SB RAS, Irkutsk, Russia
[ONLINE](#)

14:00-18:20 **ROOM D** [ONLINE](#) **PROJECTOR** **DYNAMICS**

Dynamical Systems 2

CHAIR: Tayana Zarodnyuk

SECRETARY: Pavel Petrenko

- 14:00** **Igor Burkin, Oksana Kuznetsova**
14:20
An Approach to Constructing Matryoshka Multistable Dynamical Systems
Tula State University, Tula, Russia
[ONLINE](#)

- 14:20** **Gadirli Nigar**
14:40
Spectral Properties of Sturm-Liouville Type Operators
Sumgayit State University, Sumgayit, Azerbaijan
[ONLINE](#)

- 14:40** **Nurxon Samijonova**
15:00
The Fixed Points of the Dynamical System: p -adic Potts Model with an External Field
Namangan State University, Namangan, Uzbekistan
[ONLINE](#)
-
- 15:20** **Mikhail Mulyukov**
15:40
Sturm Sequences for Delay-Independent Stability
Perm State National Research University, Perm, Russia
[ONLINE](#)
-
- 15:40** **Hamlet Guliyev, Vusala Nasibzadeh**
16:00
Optimal Control Problem for Acoustic Equation and Algorithm for Finding Approximate Solution in One Special Case
Institute of Mathematics and Mechanics, Baku, Azerbaijan; Sumgayit State University, Sumgayit, Azerbaijan
[ONLINE](#)
-
- 16:20** **Polina Tsareva**
16:40
Mixed-Precision Computations in Poisson's Equation Solution Time Optimization in Computational Fluid Dynamics
Saint Petersburg State Marine Technical University, Saint Petersburg, Russia
[ONLINE](#)
-
- 16:40** **Anastasiya Andrianova**
17:00
About One Method for Solving a Partially Boolean Programming Problem Based on Gradient Descent and the Adaptive Method of Centers
Kazan (Volga Region) Federal University, Kazan, Russia
[ONLINE](#)
-
- 17:00** **Konstantin Shilov**
17:20
Analysis of Fixed Points and Bifurcations in a Generalized Lorenz System with Cross Nonlinearities
Vologda State University, Vologda, Russia
[ONLINE](#)
-
- 17:20** **Elena Molchanova Alves, Manuel Alves, Joao Munembe, Yury Nepomnyashchikh**
17:40
A Criterion for the Complete Continuity of the Urysohn Operator in Spaces of Continuous Banach-Valued Functions
Higher Institute of Sciences and Technology of Mozambique, Maputo, Mozambique; Eduardo Mondlane University, Maputo, Mozambique
[ONLINE](#)
-
- 17:40** **S. Siniukov, Alexander Shapovalov**
18:00
Semiclassical Asymptotics of the One-Dimensional Nonlocal Fisher-KPP Equation with a Fractal Time Derivative in the Weak Diffusion Approximation
Tomsk State University, Tomsk, Russia
[ONLINE](#)
-
- 18:00** **Maxim Shamolin**
18:20
Integrable Systems with Dissipative Shift Generator
Lomonosov Moscow State University, Moscow, Russia
[ONLINE](#)

15:20-18:20 **ROOM A** [ONLINE](#) [PROJECTOR](#) [SOUND](#) **PDE**

Partial Differential Equations 2

CHAIR: Gennadii Demidenko

SECRETARY: Liubov Solovarova

15:20 **Gennadii Demidenko**
15:40
On the Solvability of the Cauchy Problem for Pseudohyperbolic Equations in Weighted Sobolev Spaces
Novosibirsk State University, Novosibirsk, Russia
[ON-SITE](#)

15:40 **Mardona Ganzhaeva**
16:00
On the Bounded Solutions of Linear Difference Systems with Periodic Coefficients
Novosibirsk State University, Novosibirsk, Russia
[ON-SITE](#)

16:20

Arukhan Narekeeva

16:40

Estimates of Solutions to Nonlinear Systems with Periodic Coefficients in Linear Terms and Several Delays

Novosibirsk State University, Novosibirsk, Russia

ON-SITE

16:40

Xin Ma

17:00

Energy Estimates for Solutions to the Generalized Boussinesq Equation with Variable Coefficients

Novosibirsk State University, Novosibirsk, Russia

ON-SITE

17:00

Dilshod Mamanazarov

17:20

Spatially Nonlocal Boundary Value Problems for Higher-Order Parabolic Equations

Novosibirsk State University, Novosibirsk, Russia

ONLINE

17:20

Sanjar Mingnarov

17:40

Solvability Conditions for One Pseudohyperbolic System

Novosibirsk State University, Novosibirsk, Russia

ONLINE

17:40

Vakhobiddin Nurmakhmatov

18:00

On the Regularity of the Solution to One Uniformly Strictly Pseudohyperbolic Equation

Novosibirsk State University, Novosibirsk, Russia

ONLINE

18:00

Bakhtovar Barotov

18:20

Regular Solutions in Sobolev Spaces for Degenerate Integro-Differential Equations

Novosibirsk State University, Novosibirsk, Russia

ONLINE

June 24, Wednesday

10:00-10:15 Coffee Break	11:15-11:30 Coffee Break	12:30-14:00 Lunch
15:00-15:20 Coffee Break		

09:00-12:30 ROOM A [ONLINE](#) [PROJECTOR](#) [SOUND](#)

Lecture Courses

CHAIR: Alexander Gornov
SECRETARY: Anton Anikin

09:00
10:00
Yuri Ledyaev
Plenary Talk TBA
 Western Michigan University, USA
[ONLINE](#)

10:15
11:15
Shuguang Li
Higher-Order Compact Difference Methods for Nonlinear Dispersive Wave Equations. Lecture 1
 School of Science, Dalian Maritime University, Dalian, China
[ON-SITE](#)

11:30
12:30
Shuguang Li
Higher-Order Compact Difference Methods for Nonlinear Dispersive Wave Equations. Lecture 2
 School of Science, Dalian Maritime University, Dalian, China
[ON-SITE](#)

14:00-15:00 ROOM A [ONLINE](#) [PROJECTOR](#) [SOUND](#)

Lecture Course / Invited Talk

CHAIR: Ivan Finogenko
SECRETARY: Elena Chistyakova

14:00
15:00
Hui Liang
Compatibility of Collocation Error Analyses for Volterra Integral Equations with Smooth and Weakly Singular Kernels
 School of Science, Harbin Institute of Technology, Shenzhen, China
[ON-SITE](#)

14:00-18:20 ROOM C [ONLINE](#) [PROJECTOR](#) [PDE](#)

Partial Differential Equations 3

CHAIR: Pavel Kuznetsov
SECRETARY: Liubov Solovarova

14:00
14:20
Anna Duyunova
Quotient Equation for the One-Dimensional Inviscid Flow Along One Class of Curves
 Trapeznikov Institute of Control Sciences of RAS, Moscow, Russia
[ONLINE](#)

14:20
14:40
Valerii Dilman, Alexandra Kashcheeva
Analysis of the Critical State of the Plastic Strip with Variable Strength Along the Less Durable Layer When Stretched
 South Ural State University (National Research University), Chelyabinsk, Russia
[ONLINE](#)

14:40 15:00	Sergey Tychkov <i>Differential Invariants of the WDVV Equation</i> Trapeznikov Institute of Control Sciences of RAS, Moscow, Russia ONLINE
15:20 15:40	Khayala Seyfullaeva <i>An Optimal Control Problem for Hyperbolic Equations</i> Sumgayit State University, Sumgayit, Azerbaijan ONLINE
15:40 16:00	Anvar Hasanov, Sardor Rashidov <i>Application of the Hankel Transform to Solving Cauchy Problem for Model Partial Differential Equation</i> V. I. Romanovskiy Institute of Mathematics, Uzbekistan Academy of Sciences, Tashkent, Uzbekistan; Muhammad al-Khwarizmi Specialized IT School, Tashkent, Uzbekistan ONLINE
16:20 16:40	Alexandr Barinov <i>On a Problem of Traffic Flow Speed Control in the Payne-Whitham Model</i> Chelyabinsk State University, Chelyabinsk, Russia ONLINE
16:40 17:00	Alexander Morozov <i>On the Global Solvability of the Wave Equation on a Geometric Graph with Second Derivative in Transmission Conditions</i> Voronezh State University, Voronezh, Russia ONLINE
17:00 17:20	Irina Guseynikova, Vyacheslav Provotorov <i>Difference Scheme of the Stationary Navier-Stokes-Oseen System in the Class of Summable Functions with Support in a Network-Like Domain</i> Peter the Great St. Petersburg Polytechnic University, St. Petersburg, Russia; Voronezh State University, Voronezh, Russia ONLINE
17:20 17:40	Muslima Hakimova <i>Description of $G_2^{(2)}$-Periodic Ground States for the $(m + 1)$-State Chui-Weeks Model</i> Namangan State University, Namangan, Uzbekistan ONLINE
17:40 18:00	Alexander Vasilyev, Vladimir Vasilyev, Igor Shmal <i>On Elliptic Equations in Cones with Different Smoothness</i> Belgorod State National Research University, Belgorod, Russia ONLINE
18:00 18:20	Sevinj Sabir Hadiyeva <i>The Riman Method for a Second-Order Hyperbolic Equation</i> Sumgayit State University, Sumgayit ONLINE

14:00-18:00 **ROOM D** [ONLINE](#) **PROJECTOR** **CONTROL THEORY**

Calculus of Variations and Mathematical Control Theory 2

CHAIR: Olga Samsonyuk

SECRETARY: Pavel Petrenko

14:00 14:20	Alexander Shanenin, Nikolai Trusov <i>Mathematical Modeling of Credit Debt Repayment Strategies</i> Federal Research Center «Computer Science and Control» of the Russian Academy of Sciences, Moscow, Russia ONLINE
14:20 14:40	Natalia Manakova, Sergey Lushnikov, Nadezhda Nikolaeva <i>Numerical Modelling of the Optimal Control Problem for a Degenerate Stochastic Nonlinear Filtration Equation</i> South Ural State University (National Research University), Chelyabinsk, Russia ONLINE

14:40 **Dmitry Vinokursky**
15:00
Fault-Tolerance Control Based on Integral Super-Twisting Algorithm and Barrier Function for Quadrotors
North Caucasian Federal University, Stavropol, Russia
[ONLINE](#)

15:20 **Vladimir Korolev, Elena Polyakhova, Irina Pototskaya, Yulia Pupysheva**
15:40
Applied Problems of Space Dynamics
St. Petersburg State University, St. Petersburg, Russia
[ONLINE](#)

15:40 **Alyona Zamyshlyayeva, Evgeniy Bychkov**
16:00
Optimal Control in a Degenerate Hydrodynamic Model with Cubic Nonlinearity and Damping
South Ural State University (National Research University), Chelyabinsk, Russia
[ONLINE](#)

16:20 **Veniamin Kurokhtin**
16:40
Method for the Approximate Solution of Constrained Optimal Control Problems in the Class of Piecewise-Constant Controls
Buryat State University, Ulan-Ude, Russia
[ONLINE](#)

16:40 **Ivan Kazmin**
17:00
Fixed Point Methods in Bilinear Optimal Control Problems
Buryat State University, Ulan-Ude, Russia
[ONLINE](#)

17:00 **Valery Gaiko**
17:20
Global Bifurcations of Limit Cycles in a Multi-Parameter Predator-Prey Model
United Institute of Informatics Problems, National Academy of Sciences of Belarus, Minsk, Belarus
[ONLINE](#)

17:20 **Alexander Buldaev**
17:40
Conditions and Methods of the Maximum Principle Based on Fixed Point Problems
Buryat State University, Ulan-Ude, Russia
[ONLINE](#)

17:40 **Varvara Davydova, Alexander Shlapunov**
18:00
Sparse Minimizing in Hardy Spaces of Holomorphic Functions
Siberian Federal University, Krasnoyarsk, Russia
[ONLINE](#)

15:20-18:00 **ROOM A** [ONLINE](#) [PROJECTOR](#) [SOUND](#) **NONLINEAR ANALYSIS**

Nonlinear Analysis and Its Applications 2

CHAIR: Ivan Finogenko
SECRETARY: Pavel Sorokovikov

15:20 **Ivan Finogenko**
15:40
Pulse-Sliding Modes in Systems with Aftereffect
Matrosov Institute for System Dynamics and Control Theory SB RAS, Irkutsk, Russia
[ON-SITE](#)

15:40 **Ernazar Mambetniyazov**
16:00
Estimates of Solutions to a Class of Systems of Differential Equations of Neutral Type with Several Delays
Novosibirsk State University, Novosibirsk, Russia
[ON-SITE](#)

16:20 **Irina Fankina**
16:40
On the Equilibrium of a Timoshenko Plate with a Crack and a Free Edge
Novosibirsk State University, Novosibirsk, Russia
[ON-SITE](#)

16:40
17:00

Evgeny Zhukovskiy, Dmitry Lobkov

A Theorem on the Parameter Dependence of Coincidence Points and Applications to the Study of a Class of Functional Differential Equations

Derzhavin Tambov State University, Tambov, Russia

[ONLINE](#)

17:00
17:20

Alexander Menovschikov, Alexander Ukhlov

Compactness of Weighted Sobolev Trace Operators in Outward Cuspidal Domains

HSE University, Moscow, Russia; Ben-Gurion University of the Negev, Beer Sheva, Israel

[ON-SITE](#)

17:20
17:40

Nadezhda Andrushechkina, Arkadii Kim

Direct and Inverse Problems of HIV Dynamics

Ural State Agrarian University, Ekaterinburg, Russia; Krasovskii Institute of Mathematics and Mechanics UB RAS, Ekaterinburg, Russia

[ONLINE](#)

17:40
18:00

Anton Kulagin, Alexander Shapovalov

Quasi-Steady Vortex States as the Semiclassical Stage of the Vortex Lattice Formation in an Open Nonlinear Quantum System

Tomsk Polytechnic University, Tomsk, Russia; Institute of Atmospheric Optics SB RAS, Tomsk, Russia; Tomsk State University, Tomsk, Russia

[ONLINE](#)

15:20-18:20 **ROOM B** [ONLINE](#) **PROJECTOR** **DYNAMICS**

Dynamical Systems 3

CHAIR: Inessa Matveeva

SECRETARY: Svetlana Svinina

15:20
15:40

Inessa Matveeva

On Properties of Solutions to Nonautonomous Time-Delay Systems

Novosibirsk State University, Novosibirsk, Russia

[ON-SITE](#)

15:40
16:00

Elena Gurevich

Energy Function of Morse-Smale Diffeomorphisms

HSE University, Nizhny Novgorod, Russia

[ON-SITE](#)

16:20
16:40

Vladislav Prokhorov

On the Asymptotic Stability of Systems of Differential Equations with Almost Periodic Coefficients

Novosibirsk State University, Novosibirsk, Russia

[ON-SITE](#)

16:40
17:00

Viktor Denisiuk

About One Class of Nonlinear High-Dimensional Systems of Differential Equations

Novosibirsk State University, Novosibirsk, Russia

[ON-SITE](#)

17:00
17:20

Vlas Karavaikin

On the Asymptotic Stability of Solutions to a Class of Nonlinear Delay Difference Equations with Periodic Coefficients in Linear Terms

Novosibirsk State University, Novosibirsk, Russia

[ON-SITE](#)

17:20
17:40

Ivan Ilinykh

On Properties of a Sequence of Lyapunov Functions Defined by One Class of High-Dimensional Systems of Differential Equations

Novosibirsk State University, Novosibirsk, Russia

[ON-SITE](#)

17:40

18:00

Alexey Egorov

Stability Analysis of Delay Systems via a Modified Razumikhin Theorem

St. Petersburg State University, St. Petersburg, Russia

ON-SITE

18:00

18:20

Maria Skvortsova

Differential Equations of Neutral Type with Distributed Delay and a Model of Motion of an Elastic Aircraft

Novosibirsk State University, Novosibirsk, Russia

ONLINE

09:40-10:00 Coffee Break	12:30-14:00 Lunch	16:00-16:30 Closing Ceremony Room A ONLINE PROJECTOR SOUND
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09:00-10:00 ROOM A [ONLINE](#) [PROJECTOR](#) [SOUND](#) **NONLINEAR ANALYSIS**

Student Section: Nonlinear Analysis and Extremal Problems

CHAIR: Pavel Petrenko
SECRETARY: Pavel Sorokovikov

1. Yuriy Balkheev, Innokenty Abiduev
Impact of Gradient Estimation Accuracy on the Convergence of Second-Order Algorithms in Nonlinear Analysis Problems
Institute of Mathematics and Information Technologies, Irkutsk State University, Irkutsk, Russia
ON-SITE

2. Dmitriy Yavorskiy
Development of an Automated Stochastic Testing Methodology with Scenario Coverage Assessment and Adaptive Generation of Critical Situations
Institute of Mathematics and Information Technologies, Irkutsk State University, Irkutsk, Russia
ON-SITE

3. Shakhnoza Abdurakhimova
On the Fixed Points of the Mapping $[ax + b(x)]$
Namangan State University, Namangan, Uzbekistan
ON-SITE

4. Bogdan Ugryniv
An Online Optimization Model for Point-of-Sale Credit Decisions with Aggregated Portfolio Constraints
Institute of Mathematics and Information Technologies, Irkutsk State University, Irkutsk, Russia
ON-SITE

5. Vladislav Boyarintsev
Optimal Control of a Firm's Investment and Consumption Policy ()
Institute of Mathematics and Information Technologies, Irkutsk State University, Irkutsk, Russia
ON-SITE

6. Denis Tokarev
On Solvability to Certain Elliptic Equation
Belgorod State National Research University, Belgorod, Russia
ON-SITE

7. Roman Artemenko
Problem of Data Redundancy Minimization under Information Completeness Constraints: Algorithm and Efficiency Estimate
Institute of Mathematics and Information Technologies, Irkutsk State University, Irkutsk, Russia
ON-SITE

8. Stepan Kovalev
Problem of Classification and Geolocation of Construction Images Based on Convolutional Neural Networks and Spherical Trigonometry
Institute of Mathematics and Information Technologies, Irkutsk State University, Irkutsk, Russia
ON-SITE

9. Bahtiyar Jangirov

Discrete Dynamical Systems for Consistency Restoration in Multi-Agent Systems: A Categorical Approach via Asymmetric Learning Lenses

Institute of Mathematics and Information Technologies, Irkutsk State University, Irkutsk, Russia

ON-SITE

10. Gleb Kulikov

Problem of Technical Specification Generation with Full Context Transfer: Comparison of Stepwise and Monolithic Strategies

Institute of Mathematics and Information Technologies, Irkutsk State University, Irkutsk, Russia

ON-SITE

11. Sergey Nikolaenko

A Formal Model of a Turn-Based Tactical RPG System on a Discrete Grid

Institute of Mathematics and Information Technologies, Irkutsk State University, Irkutsk, Russia

ON-SITE

12. Tatiana Ul'vacheva

On the Topological Structure of Solution Set for System of Fractional Semilinear Inclusions with Hille–Yosida Operators in Banach Spaces

Voronezh State Pedagogical University, Voronezh, Russia

ON-SITE

10:00-12:20 ROOM A [ONLINE](#) [PROJECTOR](#) [SOUND](#) PDE

Partial Differential Equations 4

CHAIRS: Alexander Kosov, Eduard Semenov

SECRETARY: Anton Anikin

10:00 Alexander Balandin

10:20

Tomographic Reconstruction of Vortex Vector Fields Using Cylindrical Vector Wave Functions

Matrosov Institute for System Dynamics and Control Theory SB RAS, Irkutsk, Russia

ON-SITE

10:20 Alexander Kosov, Eduard Semenov

10:40

Multidimensional Exact Solutions for a Parabolic Monge-Ampere Equation with Delay

Matrosov Institute for System Dynamics and Control Theory SB RAS, Irkutsk, Russia

ON-SITE

10:40 Evelina Leonova

11:00

Homogenization of a Layered Composite Reinforced with Thin Gradient-Elastic Inclusions

Novosibirsk State University, Novosibirsk, Russia; Altai State University, Barnaul, Russia

ON-SITE

11:00 Rasul Safarov Choriyor ugli

11:20

On Radially Symmetric Solutions for an Elliptic Equation with $p(|x|)$ -Laplacian

Novosibirsk State University, Novosibirsk, Russia; Karshi State University, Karshi, Uzbekistan

ON-SITE

11:20 Polina Makoveeva

11:40

Robust Stability of a Parabolic System with Delay Based on a Lyapunov–Krasovskii Functional with Prescribed Derivative

St. Petersburg State University, St. Petersburg, Russia

ON-SITE

11:40

Dmitriy Shemyakin

12:00

Analytical Solution of the Dirichlet Problem for the Eikonal Equation in an Unbounded Domain

Ural Federal University, Ekaterinburg, Russia

[ONLINE](#)

12:00

E. Mukhamadiev, I. Nurov, Artem Khuseinov, M. Ubaidov

12:20

A Special Case of Limit Cycle Existence in a Piecewise Linear Second-Order Differential Equation with a Parabolic Switching Line

Vologda State University, Vologda, Russia; Tajik National University, Dushanbe, Tajikistan; Independent Researcher, Oslo, Norway

[ONLINE](#)

10:00-12:00

ROOM B

[ONLINE](#) PROJECTOR

NUMERICAL METHODS

Numerical Methods 2

CHAIR:

Svetlana Svinina

SECRETARY:

Liubov Solovarova

10:00

Svetlana Svinina

10:20

On One Variant of a Difference Scheme with Weights for a Two-Dimensional Differential-Algebraic System

Matrosov Institute for System Dynamics and Control Theory SB RAS, Irkutsk, Russia

ON-SITE

10:20

Elena Chistyakova, Viktor Chistyakov

10:40

On Numerical Experiments for Solving Initial Value Problems for Singular Systems of Quasi-Linear Volterra Integral Differential Equations of General Form

Matrosov Institute for System Dynamics and Control Theory SB RAS, Irkutsk, Russia

ON-SITE

10:40

Liubov Solovarova

11:00

Collocation-Variational Difference Scheme for Solving the Inverse Kinematics Problem

Matrosov Institute for System Dynamics and Control Theory SB RAS, Irkutsk, Russia

ON-SITE

11:00

Pavel Sorokovikov

11:20

A Comparative Study of Swarm Intelligence Algorithms Applied to the Morse Potential Optimization Problem

Matrosov Institute for System Dynamics and Control Theory SB RAS, Irkutsk, Russia

ON-SITE

11:20

Elizaveta Vikulova, Anton Tostikhin

11:40

Comparative Analysis of SLAM Algorithms for Mobile Robots

Matrosov Institute for System Dynamics and Control Theory SB RAS, Irkutsk, Russia

[ONLINE](#)

11:40

Tatiana Gruzdeva, Mariia Gruzdeva

12:00

On Local Search in Mahalanobis-Distance-Based Clustering Problem

Matrosov Institute for System Dynamics and Control Theory SB RAS, Irkutsk, Russia; Irkutsk National Research Technical University, Irkutsk, Russia

[ONLINE](#)

10:00-12:40

ROOM C

[ONLINE](#) PROJECTOR

CONTROL THEORY

Calculus of Variations and Mathematical Control Theory 3

CHAIR:

Olga Samsonyuk

SECRETARY:

Pavel Petrenko

10:00

Stepan Sorokin, Olga Samsonyuk

10:20

Terminal Constraints in the Feedback Minimum Principle: Challenges and Numerical Implementation

Matrosov Institute for System Dynamics and Control Theory SB RAS, Irkutsk, Russia

ON-SITE

10:20

Olga Samsonyuk

10:40

Relaxed Solutions for Controlled Nonconvex Sweeping BV-Processes

Matrosov Institute for System Dynamics and Control Theory SB RAS, Irkutsk, Russia

ON-SITE

10:40

Tatiana Zarodnyuk

11:00

Numerical Methods for Solving Non-Convex Optimal Control Problems Based on the Linear Connectivity Property of the Reachable Set

Matrosov Institute for System Dynamics and Control Theory SB RAS, Irkutsk, Russia

ON-SITE

11:00

Stepan Sorokin

11:20

Feedback Minimum Principle and Approximate Maximum Principle for Discrete Optimal Control Problems

Matrosov Institute for System Dynamics and Control Theory SB RAS, Irkutsk, Russia

ON-SITE

11:20

Pavel Petrenko

11:40

On Observability of Differential-Algebraic Systems with Hysteresis Modeled by a Sweeping Process

Matrosov Institute for System Dynamics and Control Theory SB RAS, Irkutsk, Russia

ON-SITE

11:40

Denis Sidorov, Maksim Staritsyn

12:00

Indirect Algorithms in Optimal Control of Diffusion Processes

Harbin Institute of Technology, Harbin, China; Melentiev Energy Systems Institute SB RAS, Irkutsk, Russia; Irkutsk National Research Technical University, Irkutsk, Russia; Matrosov Institute for System Dynamics and Control Theory SB RAS, Irkutsk, Russia

ON-SITE

12:00

Elena Goncharova, Nikolay Pogodaev, Olga Samsonyuk, Maksim Staritsyn

12:20

Exact Increment Formulas in Optimal Control of Nonlocal Balance Equations

Matrosov Institute for System Dynamics and Control Theory SB RAS, Irkutsk, Russia

ON-SITE

12:20

Alexander Tyatyushkin

12:40

Multi-Method Optimization of Control

Matrosov Institute for System Dynamics and Control Theory SB RAS, Irkutsk, Russia

ON-SITE

14:00-15:40

ROOM A

ONLINE PROJECTOR SOUND

OPTIMIZATION

Optimization 2

CHAIR: Alexander Strelalovsky

SECRETARY: Nikita Kosyanov

14:00

Alexander Strelalovsky

14:20

New Approach to Epidemic Nonconvex Optimal Control Problem

Matrosov Institute for System Dynamics and Control Theory SB RAS, Irkutsk, Russia

ON-SITE

14:20

Alexander Strelalovsky, Nikita Kosyanov

14:40

On Epidemic Nonconvex Optimal Control Problems

Matrosov Institute for System Dynamics and Control Theory SB RAS, Irkutsk, Russia

ON-SITE

14:40

Enkhbat Rentsen, Batbileg Sukhee, Tungalag Natsagdorj

15:00

A Sphere Packing Approach to Multi-Objective Optimization Problem and Its Applications

Institute of Mathematics and Digital Technology, Mongolian Academy of Sciences, Mongolia; National University of Mongolia, Mongolia

ONLINE

15:00

Eugenii Timokhin

15:20

Optimal Arc Shape in a Potential Flat Flow

Lomonosov Moscow State University, Moscow, Russia

ONLINE

15:20

15:40

Rafik Khachatryan

Subgradient and Finite-Difference Stochastic Methods for Quasiconvex Optimization Problems: Convergence Rate

Yerevan State University, Yerevan, Armenia

[ONLINE](#)

14:00-15:40

ROOM B

[ONLINE](#) PROJECTOR

DYNAMICS

Dynamical Systems 4

CHAIR: Alla Shcheglova

SECRETARY: Elena Chistyakova

14:00

14:20

Nidhi Shukla

Neural-Enhanced Stochastic Inverse Control

Indian Institute of Technology Roorkee, Uttarakhand, India

[ONLINE](#)

14:20

14:40

Suman Kumar

Controllability of Abstract State-Dependent Delay Systems with Nonlocal Conditions

Department of Mathematics, IGNTU Amarkantak, Madhya Pradesh, India

[ONLINE](#)

14:40

15:00

Yurong Shi, Rui Gao, Xiaotong Chen

Retinal Image Restoration Using Total Variation with Overlapping Group Sparsity

School of Science, Dalian Maritime University, Dalian, China

[ONLINE](#)

15:00

15:20

Xuzhou Zhan

On the Stability Criteria via Finite Hankel Matrices for Regular Matrix Polynomials

Department of Mathematics, Beijing Normal University at Zhuhai, Zhuhai, China

[ONLINE](#)

15:20

15:40

Gunay Rzayeva

Investigation of Differential Equations with Increasing Coefficients by Means of Transformation Operators

Sumgayit State University; Sumgayit; Azerbaijan

[ONLINE](#)