

Саратовский государственный технический университет имени Гагарина Ю.А.  
**ПРОГРАММА Международной научно-практической конференции ICIT-2019 "Информационно-коммуникационные технологии в науке и производстве"**  
**International Conference on Information Technologies ICIT-2019: Information and Communication Technologies for Industry and Research**  
 7-8 февраля 2019 г.

**ТОРЖЕСТВЕННОЕ ОТКРЫТИЕ КОНФЕРЕНЦИИ. ПЛЕНАРНОЕ ЗАСЕДАНИЕ (ауд. 1/319а)**

**07.02.2019**

<i>Время</i>	<i>Тип доклада (пленарный, устный, стендовый)</i>	<i>ФИО докладчика</i>	<i>Название доклада</i>
<b>10<sup>00</sup>-10<sup>10</sup></b>	Приветствие от организаторов конференции	<b>Афонин Олег Александрович</b> , и.о. ректора Саратовского государственного технического университета имени Гагарина Ю.А. <b>Oleg Afonin</b> , acting rector of Yuri Gagarin State Technical University of Saratov	Приветствие от организаторов конференции /Welcome words from organizers
<b>10<sup>10</sup> - 10<sup>40</sup></b>	<i>Пленарный доклад</i>	<b>Смирнов Сергей Викторович</b> , доктор технических наук, профессор, Институт проблем управления сложными системами Российской академии наук, Самара <b>Sergey Smirnov</b> , Doctor of Sciences, professor, Institute for the Control of Complex Systems of Russian Academy of Sciences, Samara	Модели и методы онтологического анализа данных / Models and methods of ontological data analysis
<b>10<sup>40</sup> - 11<sup>10</sup></b>	<i>Пленарный доклад</i>	<b>Жмудь Вадим Аркадьевич</b> , доктор технических наук, профессор, Новосибирский государственный технический университет <b>Vadim Zhmud</b> , Doctor of Sciences, professor, Novosibirsk State Technical University	Проектирование регуляторов для сложных объектов. Новые структуры и методы оптимизации / Design of controllers for complex objects. New structures and optimization methods
<b>11<sup>10</sup> - 11<sup>40</sup></b>	<i>Пленарный доклад</i>	<b>Печенкин Виталий Владимирович</b> , доктор социологических наук, профессор кафедры "Прикладные информационные технологии" СГТУ имени Гагарина Ю.А. <b>Vitaly Pechenkin</b> , Doctor of Sciences, professor of the department of applied IT of Yuri Gagarin State Technical University of Saratov	Combined Intellectual & Petri Net with Priorities Approach to the Waste Disposal in the Smart City / Комбинированный метод анализа эффективности интеллектуальных технологий на основе сетей Петри с приоритетами в задаче управления вывозом отходов умного города
<b>11<sup>40</sup> - 12<sup>10</sup></b>	<i>Пленарный доклад</i>	<b>Львов Алексей Арленович</b> , доктор технических наук, профессор кафедры "Информационно-коммуникационные системы и программная инженерия" Саратовского	A New Broadband Receiver for Software Defined Radio and Radio Frequency Identification Systems /

		государственного технического университета имени Гагарина Ю.А., Саратов <b>Alexey L'vov</b> , Doctor of Sciences, professor of the department of information and communication systems and software engineering of Yuri Gagarin State Technical University of Saratov	Новый широкополосный приемник для систем программно-конфигурируемой радиосвязи и радиочастотной идентификации
<b>12<sup>10</sup> - 12<sup>40</sup></b>	<i>Пленарный доклад</i>	<b>Светлов Михаил Семенович</b> , доктор технических наук, ведущий научный сотрудник Института проблем точной механики и управления Российской академии наук, Саратов <b>Michael Svetlov</b> , Doctor of Sciences, leading researcher of the Institute of Precision Mechanics and Control of Russian Academy of Sciences, Saratov	Modern challenges of coding theory / Современные проблемы теории кодирования
<b>Перерыв 12<sup>40</sup> - 13<sup>30</sup></b>			

Секция: **Models, Methods & Approaches in Decision Making Systems (ауд. 1/319а)**

<b>07.02.2019</b>			
<i>Время</i>	<i>Тип доклада</i>	<i>ФИО докладчика</i>	<i>Название доклада</i>
<b>13<sup>30</sup> -13<sup>45</sup></b>	<i>Устный доклад 1</i>	<b>Tatyana Buldakova, Darina Krivosheeva</b>	Data Protection During Remote Monitoring Of Person's State
<b>13<sup>45</sup> -14<sup>00</sup></b>	<i>Устный доклад 2</i>	<b>Tatiana Moiseeva, Sergey Smirnov</b>	Principles of Managing the Process of Innovative Ideas Genesis
<b>14<sup>00</sup> -14<sup>15</sup></b>	<i>Устный доклад 3</i>	<b>Sofia Kouah, Ilham Kitouni</b>	Towards Fuzzy Partial Global Fault Diagnosis
<b>14<sup>15</sup> -14<sup>30</sup></b>	<i>Устный доклад 4</i>	<b>Konstantin Neusypin, Maria Selezneva, Andrey Proletarsky</b>	Nonlinear Information Processing Algorithm For Navigation Complex With Increased Degree Of Parametric Identifiability
<b>14<sup>30</sup> -14<sup>45</sup></b>	<i>Устный доклад 5</i>	<b>Vadim Zhmud, Alexander Liapidevskiy, Galina Frantsuzova</b>	Sketch Design of an Information System for Personnel Management of a Large State Corporation
<b>14<sup>45</sup> -15<sup>00</sup></b>	<i>Устный доклад 6</i>	<b>Armen Kostanyan, Ani Karapetyan</b>	String Matching in Case of Periodicity in the Pattern
<b>15<sup>00</sup> -15<sup>15</sup></b>	<i>Устный доклад 7</i>	<b>Oleg Protalinsky, Anna Khanova, Ivan Shcherbatov</b>	Simulation of Power Assets Management Process
<b>15<sup>15</sup> -15<sup>30</sup></b>	<i>Устный доклад 8</i>	<b>Nadezhda Ivannikova, Pavel Sadchikov, Alexandr Zholobov</b>	Mathematical Modeling of the Process of Engineering Structure Curvature Determination for Remote Quality Control of Plaster Works
<b>15<sup>30</sup> -15<sup>45</sup></b>	<i>Устный доклад 9</i>	<b>Slav Dimitrov, Lubomir Dimitrov, Reneta Dimitrova, Stelian Nikolov</b>	Examination of the Process of Automated Closure of Containers with Screw Caps

<b>15<sup>45</sup> -16<sup>00</sup></b>	<i>Устный доклад 10</i>	<b>Irbulat Utepbergenov, Leonid Bobrov, Irina Medyankina, Zinaida Rodionova, Shara Toibaeva</b>	About the concept of creating an information support system for innovative economy in the republic of Kazakhstan
<b>16<sup>00</sup> -16<sup>15</sup></b>	<i>Устный доклад 11</i>	<b>Galina Frantsuzova, Vadim Zhmud, Anatoly Vostrikov</b>	Possibilities of Typical Controllers for Low Order Non-Linear Non-Stationary Plants
<b>16<sup>15</sup> -16<sup>30</sup></b>	<i>Устный доклад 12</i>	<b>Vadim Zhmud, Galina Frantsuzova, Lubomir Dimitrov, Jaroslav Nosek</b>	Formalization of Requirements for Locked-Loop Control Systems for Their Numerical Optimization
<b>16<sup>30</sup> -16<sup>45</sup></b>	<i>Устный доклад 13</i>	<b>Kate Tairova, Vadim Shishkin, Leonid Kamalov</b>	Design Automation of Digital In-process Models of Parts of Aircraft Structures
<b>16<sup>45</sup> -17<sup>00</sup></b>	<i>Устный доклад 14</i>	<b>Vladimir Khryashchev, Anton Lebedev, Olga Stepanova, Anastasiya Srednyakova</b>	Using Convolutional Neural Networks in the Problem of Cell Nuclei Segmentation on Histological Images

Секция: **Models, Methods & Approaches in Decision Making Systems (ауд. 1/422)**

<b>07.02.2019</b>			
<i>Время</i>	<i>Тип доклада</i>	<i>ФИО докладчика</i>	<i>Название доклада</i>
<b>13<sup>30</sup> -13<sup>45</sup></b>	<i>Устный доклад 1</i>	<b>Alexander Brovko, Guido Link</b>	Numerical Study of Eigenmodes Propagation Through Rectangular Waveguide with Quarter-Wave Chokes on the Walls
<b>13<sup>45</sup> -14<sup>00</sup></b>	<i>Устный доклад 2</i>	<b>Anton Romanov, Aleksey Filippov, Nadezhda Yarushkina</b>	Extraction and Forecasting Time Series Of Production Processes
<b>14<sup>00</sup> -14<sup>15</sup></b>	<i>Устный доклад 3</i>	<b>Stanislav Daurov, Sergey Potemkin, Svetlana Kumova, Tatiana Kamenskikh, Igor Kolbenev, Elena Chernyshkova</b>	Computer Analysis of Geometrical Parameters of the Retina Epiretinal Membrane
<b>14<sup>15</sup> -14<sup>30</sup></b>	<i>Устный доклад 4</i>	<b>Dmitry Klenov, Michael Svetlov, Alexey L'vov, Marina Svetlova, Dmitry Mishchenko.</b>	Synthesis of the Information Channel with Codec Based on Code Signal Feature
<b>14<sup>30</sup> -14<sup>45</sup></b>	<i>Устный доклад 5</i>	<b>Nadezhda Yarushkina, Aleksey Filippov, Maria Grigoricheva</b>	Using of Linguistic Analysis of Search Query for Improving Quality of Information Retrieval
<b>14<sup>45</sup> -15<sup>00</sup></b>	<i>Устный доклад 6</i>	<b>Sergey Kirillov, Vladimir Dmitriev, Leonid Aronov, Petr Skonnikov, Andrew Baukov</b>	Improved Quality Video Transmission by Optical Channel From Underwater Mobile Robots
<b>15<sup>00</sup> -15<sup>15</sup></b>	<i>Устный доклад 7</i>	<b>Dmitry Fominykh, Alexander Rezhikov, Vadim Kushnikov, Vladimir Ivaschenko, Tatyana Shulga, Andrey Samartsev</b>	The Task of Reducing the Cost of Production During Welding By Robotic Technological Complexes
<b>15<sup>15</sup> -15<sup>30</sup></b>	<i>Устный доклад 8</i>	<b>Elena Kushnikova, Ekaterina Kulakova, Sergei Alipchenko, Alexander Rezhikov, Vadim Kushnikov, Vladimir Ivaschenko</b>	Models and Methods for Determining Damage from Atmospheric Emissions of Industrial Enterprises

<b>15<sup>30</sup> -15<sup>45</sup></b>	<i>Устный доклад 9</i>	<b>Olga Dolinina, Alexander Voloshinov</b>	Computer Analysis of the Equilibrium in Painting
<b>15<sup>45</sup> -16<sup>00</sup></b>	<i>Устный доклад 10</i>	<b>Sergey Suyatinov</b>	Bernstein's theory of levels and its application for assessing the human operator state
<b>16<sup>00</sup> -16<sup>15</sup></b>	<i>Устный доклад 11</i>	<b>Sergey Papshev, Alexander Sytnik, Nina Melnikova, Alexey Bogomolov</b>	Semantic Marking Method for Non-text Documents of Website Based on their Context in Hypertext Clustering
<b>16<sup>15</sup> -16<sup>30</sup></b>	<i>Устный доклад 12</i>	<b>Ekaterina Kulakova, Sergei Alipchenko, Alexander Rezchikov, Vadim Kushnikov, Elena Kushnikova, Olga Glukhova</b>	Optimal Control Problems of Compressor Facilities Processes at Industrial Enterprise
<b>16<sup>30</sup> -16<sup>45</sup></b>	<i>Устный доклад 13</i>	<b>Yulia Pityuk, Olga Abramova, Nazgul Fatkullina, Aiguzel Bulatova</b>	BEM Based Numerical Approach for the Study of the Dispersed Systems Rheological Properties
<b>16<sup>45</sup> -17<sup>00</sup></b>	<i>Устный доклад 14</i>	<b>Anna Kalinina, Dmitry Kondratov, Yulia Kondratova, Lev Mogilevich, Victor Popov</b>	Investigation of Hydroelasticity Coaxial Geometrically Irregular and Regular Shells Under Vibration

Секция: **Mathematical Modelling for Industry & Research/ Smart City Technologies (ауд. 1/414)**

<b>07.02.2019</b>			
<i>Время</i>	<i>Тип доклада</i>	<i>ФИО докладчика</i>	<i>Название доклада</i>
<b>13<sup>30</sup> -13<sup>45</sup></b>	<i>Устный доклад 1</i>	<b>Ekaterina Kasatkina, Denis Nefedov, Ekaterina Saburova</b>	Mathematical model of adaptive control in fuel supply logistic system
<b>13<sup>45</sup> -14<sup>00</sup></b>	<i>Устный доклад 2</i>	<b>Ekaterina Kusheleva, Alexander Rezchikov, Vadim Kushnikov, Vladimir Ivaschenko, Elena Kushnikova, Andrey Samartsev</b>	Mathematical model for prediction of the main characteristics of emissions of chemically hazardous substances into the atmosphere
<b>14<sup>00</sup> -14<sup>15</sup></b>	<i>Устный доклад 3</i>	<b>Irina Veshneva, Aleksander Bolshakov, Aleksei Kulik</b>	Increasing the safety of flights with the use of mathematical model based on status functions
<b>14<sup>15</sup> -14<sup>30</sup></b>	<i>Устный доклад 4</i>	<b>Olga Perepelkina, Dmitry Kondratov</b>	Mathematical modeling of electronic records management and office work in the executive bodies of state administration
<b>14<sup>30</sup> - 14<sup>45</sup></b>	<i>Устный доклад 5</i>	<b>Natalya Yandybaeva, Alexandr Rezchikov, Vadim Kushnikov, Vladimir Ivaschenko, Oleg</b>	Mathematical Models, Algorithms And Software

		<b>Kushnikov, Anatoly Tsvirkun</b>	Package For The National Security State of Russia
<b>14<sup>45</sup> - 15<sup>00</sup></b>	<i>Устный доклад 6</i>	<b>Lev Mogilevich, Yury Blinkov, Dmitry Kondratov, Sergey Ivanov</b>	Mathematical Modeling of Waves in a Non-linear Shell with Wiscous Liquid inside It, Taking into Account its Movement Inertia
<b>15<sup>00</sup> -15<sup>15</sup></b>	<i>Устный доклад 7</i>	<b>Aleksandr Chernenko, Dmitry Kondratov, Lev Mogilevich, Victor Popov, Elizaveta Popova</b>	Mathematical Modeling of Hydroelastic Interaction between Stamp and Three-layered Beam Resting on Winkler Foundation
<b>15<sup>15</sup> - 15<sup>30</sup></b>	<i>Устный доклад 8</i>	<b>Igor Lutoshkin, Svetlana Lipatova, Yuriy Polyanskov, Nailya Yamaltdinova, Margarita Iardaeva</b>	The Mathematical Model for Describing the Principles of Enterprise Management "Just in Time, Design to Cost, Risks Management"
<b>15<sup>30</sup> - 15<sup>45</sup></b>	<i>Устный доклад 9</i>	<b>Nikita Kharitonov, Anatolii Maksimov, Alexander Tulupyev</b>	Algebraic Bayesian Networks: the Use of Parallel Computing While Maintaining Various Degrees of Consistency
<b>15<sup>45</sup> - 16<sup>00</sup></b>	<i>Устный доклад 10</i>	<b>Nickita Semezhev, Alexey L'vov, Adel Askarova, Sergey Ivzhenko, Natalia Vagarina, Elena Umnova</b>	Mathematical Modeling and Calibration Procedure of Combined Multiport Correlator
<b>16<sup>00</sup> - 16<sup>15</sup></b>	<i>Устный доклад 11</i>	<b>Aleksey Bogomolov, Alexander Rezhikov, Vadim Kushnikov, Vladimir Ivaschenko, Elena Kushnikova, Vladimir Tverdokhlebov</b>	Mathematical Models for the Analysis of the Processes of Destabilization of the Socio-Political Situation in the Country Using the Methods of Non-Violent Resistance
<b>16<sup>15</sup> - 16<sup>30</sup></b>	<i>Устный доклад 12</i>	<b>Bakhytzhhan Akhmetov, Lyazzat Balgabaeva, Valerii Lakhno, Vladimir Malyukov, Raya Alenova, Anara Tashimova</b>	Mobile Platform for Decision Support System During Mutual Continuous Investment in Technology for Smart City
<b>16<sup>30</sup> - 16<sup>45</sup></b>	<i>Устный доклад 13</i>	<b>Evgeny Basinya, Alexander Rudkovskiy</b>	Automatic Traffic Control System For SOHO Computer Networks

Секция: **Models, Methods & Approaches in Decision Making Systems (ауд. 1/414)**

**08.02.2019**

<i>Время</i>	<i>Тип доклада</i>	<i>ФИО докладчика</i>	<i>Название доклада</i>
<b>10<sup>00</sup> -10<sup>15</sup></b>	<i>Устный доклад 1</i>	<b>Anton Ivaschenko, Pavel Sitnikov, Georgiy Katirkin</b>	Accented Visualization in Digital Industry Applications
<b>10<sup>15</sup> -10<sup>30</sup></b>	<i>Устный доклад 2</i>	<b>Ilya Osinin</b>	Optimization of the Hardware Costs of Interpolation Converters for Calculations in the Logarithmic Number System
<b>10<sup>30</sup> -10<sup>45</sup></b>	<i>Устный доклад 3</i>	<b>Alexander Lada, Sergey Smirnov</b>	The Multi-Agent Method For Real Time Production Resource-Scheduling Problem

<b>10<sup>45</sup> -11<sup>00</sup></b>	<i>Устный доклад 4</i>	<b>Aleksandr Yurin, Aleksandr Berman, Olga Nikolaychuk, Nikita Dorodnykh</b>	Knowledge base engineering for industrial safety expertise: A model-driven development approach specialization
<b>11<sup>00</sup> -11<sup>15</sup></b>	<i>Устный доклад 5</i>	<b>Andrey Samartsev, Aleksander Rezhnikov, Vadim Kushnikov, Vladimir Ivaschenko, Leonid Filimonyuk, Dmitrii Fominyh, Olga Dolinina</b>	Software Package for Modeling the Process of Fire Spread and People Evacuation in Premises
<b>11<sup>15</sup> -11<sup>30</sup></b>	<i>Устный доклад 6</i>	<b>Aleksey Filippov, Vadim Moshkin, Nadezhda Yarushkina</b>	Development of a software for the semantic analysis of social media content
<b>11<sup>30</sup> -11<sup>45</sup></b>	<i>Устный доклад 7</i>	<b>Oleg Golovnin, Anastasya Stolbova, Nikita Ostroglazov</b>	An Analysis of Road Traffic Flow Characteristics using Wavelet Transform
<b>11<sup>45</sup> -12<sup>00</sup></b>	<i>Устный доклад 8</i>	<b>Anastasiia Khlobystova, Maxim Abramov, Alexander Tulupyev</b>	An approach to estimating of criticality of social engineering attacks traces
<b>12<sup>00</sup> -12<sup>15</sup></b>	<i>Устный доклад 9</i>	<b>Anastasya Stolbova, Sergey Prokhorov, Andrey Kuzmin, Anton Ivaschenko</b>	Wavelet-based Arrhythmia Detection in Medical Diagnostics Sensor Networks

Секция: **Models, Methods & Approaches in Decision Making Systems (ауд. 1/422)**

**08.02.2019**

<i>Время</i>	<i>Тип доклада</i>	<i>ФИО докладчика</i>	<i>Название доклада</i>
<b>10<sup>00</sup> -10<sup>15</sup></b>	<i>Устный доклад 1</i>	<b>Yuliya Nikulina, Tatyana Shulga, Alexander Sytnik, Natalya Frolova, Olga Toropova</b>	Ontologies of the fire safety domain
<b>10<sup>15</sup> -10<sup>30</sup></b>	<i>Устный доклад 2</i>	<b>Iurii Stroganov, Liliya Volkova, Igor Rudakov</b>	On Parallel Operations of Addition and Multiplication in Symmetric Ternary Numeral System
<b>10<sup>30</sup> -10<sup>45</sup></b>	<i>Устный доклад 3</i>	<b>Mikhail Abrosimov, Alexander Brovko</b>	High Generalization Capability Artificial Neural Network Architecture Based on RBF-network
<b>10<sup>45</sup> -11<sup>00</sup></b>	<i>Устный доклад 4</i>	<b>Alexander Geyda</b>	Dynamic Capabilities Indicators Estimation of Information Technology Usage in Technological Systems
<b>11<sup>00</sup> -11<sup>15</sup></b>	<i>Устный доклад 5</i>	<b>Olga Glukhova, Alexander Rezhnikov, Vadim Kushnikov, Oleg Kushnikov, Irina Sytnik</b>	Dynamic System Model For Predicting Changes In University Indicators in the World University Ranking U-Multirank
<b>11<sup>15</sup> -11<sup>30</sup></b>	<i>Устный доклад 6</i>	<b>Aleksey Bogomolov, Alexander Rezhnikov,</b>	Modeling of struggle processes in the computer-

		<b>Vadim Kushnikov, Vladimir Tverdokhlebov, Oksana Soldatkina, Tatiana Shulga</b>	related crime field
<b>11<sup>30</sup> -11<sup>45</sup></b>	<i>Устный доклад 7</i>	<b>Olga Dolinina, Vadim Kushnikov</b>	Using System Dynamics for the Software Quality Management of the Decision Making Software Systems Development
<b>11<sup>45</sup> -12<sup>00</sup></b>	<i>Устный доклад 8</i>	<b>Maria Khamutova, Alexander Rezchikov, Vadim Kushnikov, Vladimir Ivaschenko, Elena Kushnikova, Andrey Samartsev</b>	Mathematical Models and Algorithms for the Management of Liquidation Process of Floods Consequences
<b>12<sup>00</sup> -12<sup>15</sup></b>	<i>Устный доклад 9</i>	<b>Vitaly Pechenkin, Mikhail Korolev, Kseniya Kuznetsova, Dmitriy Piminov</b>	Analysis of three-dimensional scene visual characteristics based on virtual modeling and parameters of surveillance sensors
<b>12<sup>15</sup> -12<sup>30</sup></b>	<i>Устный доклад 10</i>	<b>Denis Solovjev, Alexander Arzamastsev, Inna Solovjeva, Yuri Litovka, Alexey L'vov, Nina Melnikova</b>	Search of Optimum Conditions of Plating Using a Fuzzy Rule-Based Knowledge Model