

# Program

## of XXIV International Conference on Data Analytics and Management in Data Intensive Domains

05.10.22 – 07.10.22

Saint-Petersburg

### Links for online participants

SESSION 1,3,5,7,9,11,12,14,16 <a href="#">CONNECT</a> Conference ID: 851 4431 8582 Code: DAMDID1	SESSION 2,4,6,8,10,13,15,17 <a href="#">CONNECT</a> Conference ID: 881 9211 6234 Code: DAMDID2
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WEDNESDAY, OCTOBER 5	
Time	
9:15-9:30	Opening of the Conference
9:30-10:30	KEYNOTE: Mikhail Zymbler <b>Time series analytics: acceleration with parallel algorithms</b> room 1405 Chair: Sergey Stupnikov
10:30 - 11:00	<b>Coffee Break</b>
11:00 - 12:40	SESSION 1 Knowledge Management I room 1405 Chair: George Chernishev
	SESSION 2 Data Analysis in Astronomy I room 355/17 Chair: Alexei Pozanenko
11:00	<a href="#">Interpretable Taxonomy Extraction from Digital Assets Metadata Using Automated Unsupervised Decision Tree Learning</a> Ildar Baimuratov
	<a href="#">Cross-identification of selected fields of SDSS and PanSTARRS optical catalogues</a> Eugene Shekotihin, Nikolay Pankov, Alexei Pozanenko, Pavel Minaev and Sergei Belkin
11:30	<a href="#">Russian Web Tables: A Public Corpus of Web Tables for Russian Language Based on Wikipedia</a> Platon Fedorov, Alexey Mironov and George Chernishev
	<a href="#">A new version of the Binary Star Database (BDB)</a> Pavel Kaygorodov, Nikolay Skvortsov, Dana Kovaleva and Oleg Malkov
12:00	[short] <a href="#">Classes of objects and relations in the Common Digital Space of Scientific Knowledge</a> Irina Sobolevskaya, Nikolay Kalenov and Alexander Sotnikov
	<a href="#">Cross-matching of high proper motion L, T &amp; Y brown dwarfs with large photometric surveys</a> Aleksandra Avdeeva, Oleg Malkov and Sergey Karpov
12:20	[short] <a href="#">On the issue of optimum machine learning methods for filling and updating problem-oriented graphs of nuclear knowledge</a> Victor Telnov and Yuri Korovin
12:40 - 13:40	<b>Lunch</b>

13:40-15:00	SESSION 3 Knowledge Management II: Ontologies and Metadata room 1405 Chair: Sergey Stupnikov	SESSION 4 Data Analysis in Astronomy II room 355/17 Chair: Oleg Malkov
13:40	<a href="#">Difficulties of FAIR principles implementation in cross-domain research infrastructures</a> Nikolay Kalinin and Nikolay Skvortsov	<a href="#">Systematics and biases in observations of supernovae associated with gamma-ray bursts</a> Sergey Belkin and Alexei Pozanenko
14:10	<a href="#">Curation of the bibliographic metadata of the JINR institutional repository on the Invenio-JOIN2 platform</a> Irina Filozova, Tatiana Zaikina, Galina Shestakova and Roman Semenov	<a href="#">The Structure and Evolution of Open Star Clusters: Theory and Observations Based on Gaia Data</a> Ekaterina Postnikova, Olga Ryabukhina, Aleksander Tutukov, Sergey Vereshchagin, Natalia Chupina and Andrey Demidov
14:40	<a href="#">Towards an ontology of professional mathematical knowledge OntoMathPRO 2.0</a> Alexander Kirillovich, Olga Nevzorova and Evgeny Lipachev	[short] <a href="#">Time domain astronomy: large photometric surveys for study of variable stars</a> Polina Pakhomova, Leonid Berdnikov, Alexei Kniazev and Oleg Malkov
15:00		[short] <a href="#">Astronomical observation planner</a> Vitaliy Kim
15:10 – 15:30	<b>Coffee Break</b>	
15:30-17:00	SESSION 5 Data Integration room 1405 Chair: Dmitry Mouromtsev	SESSION 6 Information and analytical systems room 355/17 Chair: Viktor Zakharov
15:30	<a href="#">Основанная на запросах верификация интеграции данных в модели RDF</a> Sergey Stupnikov	<a href="#">Development of an information-analytical system for the support and maintenance of licenses at MLIT JINR</a> Evgeniy I. Alexandrov, Igor N. Alexandrov, Dmitriy V. Belyakov, Natalia A. Davydova, Lidiya A. Kalmykova, Tatiana F. Sapozhnikova, Tatiana S. Syresina, Alexandr V. Yakovlev, Petr V. Zrellov and Mariya A. Lyubimova
16:00	<a href="#">Расширяемый подход к поиску и отбору источников данных для материализованной интеграции больших данных в распределенных вычислительных средах</a> Владимир Сазонтьев, Сергей Ступников	<a href="#">On the Analysis of Individual Data on Transport Usage</a> Mark Bulygin, Dmitry Namiot and Oleg Pokusaev
16:30	<a href="#">Взаимобратное отображение графовых и реляционных баз данных</a> Abi Palagashvili and Sergey Stupnikov	
17:00	Coordinating Committee Meeting room 1405	
18:00	<b>Cultural Program</b>	

THURSDAY, OCTOBER 6		
Time		
9:30-10:30	<p>KEYNOTE: Dmitry Ignatov</p> <p><b>On the Cryptomorphism between Davis' Subset Lattices, Atomic Lattices, and Closure Systems under T1 Separation Axiom</b></p> <p>room 1405</p> <p>Chair: Natalia Loukashevitch</p>	
10:30 - 11:00	<p><b>Coffee Break</b></p>	
11:00-13:30	<p>SESSION 7</p> <p>Machine Learning Applications I</p> <p>room 1405</p> <p>Chair: Dmitry Ignatov</p>	<p>SESSION 8</p> <p>Data Analysis in Biomedicine</p> <p>room 355/17</p> <p>Chair: Mikhail Melnikov</p>
11:00	<p><a href="#">Similarity heuristics for clustering wells based on logging-data</a> Dmitrii Khliustov, Dmitry Kovalev and Sergey Safonov</p>	<p><a href="#">Robust Correlation Analysis between Resting State EEG Connectivity and Intelligence</a> Tatiana Avdeenko, Anastasiia Timofeeva and Marina Murtazina</p>
11:30	<p><a href="#">A machine learning approach to calculating the non-equilibrium diffusion coefficients in the state-to-state solution of the Navier-Stokes equations</a> Natalia Grafeeva, Elena Mikhailova and Pevl Kiva</p>	<p><a href="#">Hypothesis-Driven Virtual Experiments: A Neuroinformatics Primer</a> Dmitry Kovalev</p>
12:00	<p><a href="#">New Two-Level Ensemble Method and Its Application to Chemical Compounds Properties Prediction</a> Oleg Senko, Alexander Dokukin, Nadezhda Kiselyova, Victor Dudarev and Yuliana Kuznetsova</p>	<p><a href="#">Experience in recognizing the state of fatigue in humans using a neural network</a> Xenia Naidenova, Alexander Yakovlev, Vyacheslav Matytsin and Vladislav Veluga</p>
12:30		<p>[short] <a href="#">One-staged U-Net based and autoencoder based classifiers with attention for neoplasms recognition by single-channel monochrome computer tomography snapshots</a> Aleksei Samarin, Alexander Savelev, Alexandr Motyko, Alina Dzestelova, Aleksei Toropov, Valentin Malykh and Elena Mikhailova</p>
13:00 – 14:00	<p><b>Lunch</b></p>	
14:00-15:30	<p>SESSION 9</p> <p>Machine Learning Applications II: Economics and Education</p> <p>room 1405</p> <p>Chair: Dmitry Devyatkin</p>	<p>SESSION 10</p> <p>Machine Learning Platforms</p> <p>room 355/17</p> <p>Chair: Ildar Baimuratov</p>
14:00	<p><a href="#">Quantitative large-scale study of school student's academic performance peculiarities during distance education caused by COVID-19</a> Valentin Yunusov, Almaz Gilemzyanov, Fail Gafarov, Pavel Ustin and Alisa Khalfieva</p>	<p><a href="#">AutoML: Examining existing software implementations and determining the overall internal structure of solutions</a> Inna Popova, Georgiy Revunkov and Yuriy Gapanyuk</p>
14:30	<p><a href="#">Нейросетевой подход к оценке кредитного риска на данных кредитных историй</a> Valerii Smirnov and Sergey Stupnikov</p>	<p><a href="#">GUI for Data Analysis Automation</a> Maria Manakhova and Victor Dudarev</p>
15:00		<p><a href="#">The System.AI Project: Fully Managed Cross Platform Machine Learning and Data Analysis Stack for .NET Ecosystem</a> Gleb Brykin</p>

15:30 - 16:00	<b>Coffee Break</b>	
16:00-17:30	SESSION 11 Machine Learning Methods room 1405 Chair: Dmitry Kovalev	
16:00	<a href="#">On the Practical Generation of Counterfactual Examples</a> Dmitry Namiot, Eugene Ilyushin and Ivan Chizov	
16:30	<a href="#">A Survey of Model Inversion Attacks and Countermeasures</a> Junzhe Song and Dmitry Namiot	
17:00	<a href="#">Research the Stability of Decision Trees Using Distances on Graphs</a> Nikolai Moskin, Kirill Kulakov, Aleksandr Rogov and Roman Abramov	
18:00	<b>Cultural Program</b>	
<b>FRIDAY, OCTOBER 7</b>		
Time		
9:30-10:30	INVITED TALK MTS AI  <b>Применение микроконтроллеров Kneron со встроенными нейроускорителями для решения задач периферийного искусственного интеллекта</b> room 1405 Chair: Dmitry Mouromtsev	
10:30 - 11:00	<b>Coffee Break</b>	
11:00-12:30	SESSION 12 Information extraction from texts I room 1405 Chair: Roman Samarev	SESSION 13 Models in Earth Sciences room 355/17 Chair: Nikolay Skvortsov
11:00	<a href="#">Approaches to Relation Extraction for Nested Named Entities</a> Alexey Yandutov and Natalia Loukachevitch	<a href="#">Choosing a Data Model for the Digital Twin of Environment</a> Evgenii Viazilov, Natalya Puzova, Denis Melnikov and Alexander Mikheev
11:30	<a href="#">Prompts in Few-Shot Named Entity Recognition</a> Igor Rozhkov and Natalia Loukachevitch	<a href="#">Conditions for the effective use of artificial intelligence technologies to reduce environmental hazards and increase the agriculture efficiency of EAEU</a> Vladimir Budzko and Viktor Medennikov
12:00	<a href="#">Extraction of Requirement Bases from Domain Normative Documents and Classifiers with Application to the Russian Building Code</a> Ildar Baimuratov, Denis Turygin, Ivan Shilin, Dmitrii Pliukhin and Dmitry Mouromtsev	<a href="#">A logical model for integration of heterogeneous experimental data in soil research</a> Nadezda Vasilyeva, Artem Vladimirov and Taras Vasiliev
12:30 – 13:30	<b>Lunch</b>	
13:30-15:00	SESSION 14 Information extraction from texts II room 1405 Chair: Natalia Loukashevitch	SESSION 15 Image and Signal Processing room 355/17 Chair: Dmitry Mouromtsev
13:30	<a href="#">A method for creating structural models of text documents using neural networks</a> Ilya	<a href="#">Convolutional neural network based predictors for trainable agents movement strategies for building custom image</a>

	Kozlov, Dmitry Berezkin, Polina Martynyuk and Artyom Panfilkin	<a href="#">descriptors</a> Aleksei Samarin, Valentin Malykh, Alina Dzestelova, Alexander Savelev, Aleksei Toropov, Alexandr Motyko and Elena Mikhailova
14:00	<a href="#">Applying Transformer-based Text Summarization for Keyphrase Generation</a> Anna Glazkova and Dmitry Morozov	<a href="#">Генерация человеческого почерка на русском языке</a> Sergey Fomin and Sergey Stupnikov
14:30	[short] <a href="#">Methods of extracting biomedical information from patents and scientific publications (on the example of chemical compounds)</a> Alexey Molodchenkov, Nikolay Kolpakov and Anton Lukin	<a href="#">Simulated reference signals storage: basis for fast algorithms creation</a> Ivan Deykin, Vladimir Suzev, Elena Smirnova and Andrey Proletarsky
15:00 - 15:30	<b>Coffee Break</b>	
15:30 - 17:00	SESSION 16 Natural Language Processing and Text Analysis room 1405 Chair: Valery Sokolov	SESSION 17 Machine Learning Applications III room 355/17 Chair: Sergey Stupnikov
15:30	<a href="#">Sentence splitters benchmark</a> Anna Zavyalova and Roman Samarev	<a href="#">Deep Reinforcement Learning solution for pickup and delivery routing problems with time window and capacity constraints</a> Andrew Soroka, Alex Meshcheryakov and Sergey Gerasimov
16:00	<a href="#">The Conceptual Modeling System Based on Metagraph Approach</a> Nikita Todosiev, Vladislav Yankovskiy, Ark Andreev and Yuriy Gapanyuk	<a href="#">Economic Cycle Prediction using Machine Learning - Russia Case Study</a> Kouame Amos Brou, V. Smirnov Ivan, Aidrous Irina, Asmyatullin Ravil R. and Glavina Sofia G.
16:30	[short] <a href="#">Diagnostics of the topical model for a collection of text messages based on hierarchical clustering of terms</a> Alexander Sychev	<a href="#">Developing intelligent assistants to search for content on websites of a certain genre</a> Vladislav Rublev and Elena Sidorova
16:50	[short] <a href="#">Analysis of the cluster structure of collections of mathematical papers with different UDC codes</a> Olga Nevzorova and Bulat Gizatullin	
	<b>Closing of the Conference</b>	
18:00	<b>Conference Dinner</b>	