

Preface

In 2018 the International Conference “Data Analytics and Management in Data Intensive Domains” (DAMDID/RCDL’2018) takes place on October 9-12 in the Lomonosov Moscow State University at the department of Computational Mathematics and Cybernetics. The conference is dedicated to the memory of its founder, Leonid Kalinichenko, who passed away on July 17, 2018.

By tradition the “Data Analytics and Management in Data Intensive Domains” conference (DAMDID) is planned as a multidisciplinary forum of researchers and practitioners from various domains of science and research, promoting cooperation and exchange of ideas in the area of data analysis and management in domains driven by data intensive research. Approaches to data analysis and management being developed in specific data intensive domains (DID) of X-informatics (such as X = astro, bio, chemo, geo, med, neuro, physics, chemistry, material science etc.), social sciences, as well as in various branches of informatics, industry, new technologies, finance and business are expected to contribute to the conference content.

The program of the DAMDID/RCDL’2018, as it was at the previous editions of these conferences, alongside with the traditional data management topics reflects a rapid move into the direction of data science and data intensive analytics. The program of this year includes carefully selected invited keynote talks related to the fast developed DID. The respective plenary sessions are also aimed at attracting an attention of researchers in the selected DID to the conference.

Workshop on FAIR Data and European Open Science Cloud (EOSC) constituting the first day of the conference on October 9 includes four sessions. The first session devoted to FAIR (Findable, Accessible, Interoperable, Reusable) data principles in the realm of open science includes invited talks by Michel Schouppe (European Commission, Directorate-General for Research and Innovation) and Simon Hodson (Executive Director of CODATA). Michel Schouppe considers relevance of EOSC and FAIR and phases of implementing the EOSC, Simon Hodson overviews FAIR Data, FAIR Services and the FAIR data action plan. The second section devoted to FAIR platforms and interoperability includes invited talks by Ari Asmi (Integrated Carbon Observation System ERIC), Sergey Stupnikov (FRCCSC RAS) and Nikolay Skvortsov (FRCCSC RAS). Ari Asmi discusses building FAIR environmental services platforms in Europe, Sergey Stupnikov presents FAIR data based on extensible unifying data model development, Nikolay Skvortsov considers data interoperability and reuse among heterogeneous scientific communities. The third session devoted to FAIR implementation issues and activities includes invited talks by Peter Wittenburg (Max Planck Computing and Data Facility), Erik Schultes (Leiden University Medical Centre, GO FAIR International Support and Coordination Office) and Damien Lecarpentier (CSC-IT Center for Science). Peter Wittenburg discusses digital objects as concept to help implementing FAIR and EOSC, Erik Schultes considers accelerating convergence to an internet of FAIR data and services, Damien Lecarpentier overviews FAIR activities within the various EOSC funded initiatives. The fourth session is a panel on data access challenges for data intensive research in Russia and EOSC where experts from different regions and disciplines take the chance to discuss state and future of the FAIR action plan and the EOSC initiative, bring in their views and enrichments, and discuss active participation.

The conference Program Committee has reviewed 54 submissions for the conference and 8 submissions for the PhD workshop. For the workshop 7 papers were accepted and 1 were rejected. For the conference 24 submissions were accepted as full papers, 18 as short papers, 5 as posters, whereas 12 submissions were rejected. According to the conference program, these 47 oral presentations are structured into 14 sessions including Internet of Things and Cognitive

Systems, Data Integration and Data Analysis, Knowledge Representation, Ontologies and Applications, Data Analysis and Applications, Conceptual and Data Models, Advanced Data Analysis Methods, Data Analysis in Astronomy, Text Search and Processing, Distributed Computing and Applications of Machine Learning, Research Data Infrastructures, Information Extraction from Text.

Though most of the presentations are dedicated to the results of researches conducted in the research organizations located on the territory of the Russian Federation including Chelyabinsk, Ekaterinburg, Kazan, Moscow, Novosibirsk, Obninsk, St.-Petersburg, Tomsk, Tver, Ulyanovsk, the conference acquires features of internationalization. This move is witnessed by 13 talks (6 of them are invited) prepared by the notable foreign researchers from such countries as Armenia (Yerevan), Belgium (Brussels), Germany (Munich, Hamburg, Kiel), Great Britain (Harwell), Hungary (Budapest), Finland (Espoo, Helsinki), France (Paris), Kazakhstan (Almaty), Netherlands (Leiden).

The chairs of the Program Committee and Organizing Committee of DAMDID/RCDL'2018 express their gratitude to Nikolay Skvortsov for providing of the effective interactions by the CMT system with the authors of submissions and with the PC members reviewing the submissions, as well as for his contribution into the editing of the conference proceedings during the process of its publishing. The chairs of PC also express their gratitude to the PC members for carrying out the reviewing of the submissions and selection of the papers for presentation, as well as to Dmitry Briukhov for keeping of the up-to-date content of the conference site at all stages of the conference preparation.

The chairs of the Organizing Committee and Program Committee of DAMDID/RCDL'2018 express their gratitude to the authors of the submissions as well as to the Russian Foundation for Basic Research and the Fund "League online media" for the financial support to the Conference.

Co-chairs of the Program committee

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