

Russian Foundation for Basic Research Joint Institute for Nuclear Research Institute of Informatics Problems of RAS Moscow ACM SIGMOD Chapter

XVI All-Russian Scientific Conference RCDL'2014 "Digital libraries: Advanced Methods and Technologies, Digital Collections"

Dubna, October 13–16, 2014 http://rcdl2014.jinr.ru

The First Call for Papers

Digital Libraries are a subject of research and development aiming to create the theory and practice to process, collect, spread, store, search and analyze digital objects of different kinds. These modern repositories of knowledge are complicated online information systems, the creation and usage of which requires solution of numerous scientific, technological, methodological, economical, legal and other problems. Alongside with usual for conventional libraries textual and multimedia digital collections, the Digital Libraries systems include structured data and a variety of other digital information objects of different origin as well as their metadata. It requires many promising technologies used in modern information systems to address management issues by so diverse information resources, to meet the growing diversity of the needs of users as well as to respond new other challenges. Such technologies are developing in the area of Semantic Web and in sciences with intensive use of data because of the necessity to store and analyze Big Data, to maintain interoperability of systems, parallel data processing, integration of heterogeneous information resources and extremely rapid increase of their volume. The Digital Libraries issues focus primarily on innovation technologies which provide the handling of information resources with

Development of Digital Libraries technologies is becoming more and more essential to meet higher standards of science, economics, education, culture, health as well as of the quality of life in general. Scientific Digital Libraries play an important role in actively promoted initiatives of the scientific community in providing of the open access to research results and in the formation of the open science. Intensive activity on digital preservation of information about the Earth, Universe, Science, Literature, Art, Environment and Man accumulated by humanity contributes to formation of global knowledge and data repositories.

The series of the All-Russian scientific conferences RCDL is presented on the site http://rcdl.ru. They aimed at the formation of the Russian corps of the global Digital Libraries community of scientists. The conferences held in the cities of St. Petersburg, Protvino, Dubna, Petrozavodsk, Pushchino, Yaroslavl, Suzdal, Pereslavl, Kazan and Voronezh and attended by a lot of scientists from leading Russian and foreign research centers from Austria, Germany, Greece, Italy, New Zealand, USA, Ukraine and other countries.

RCDL-2014 Conference Topics

- > Advanced projects for information systems in science
- ➤ Big Data technologies
- Composition presentation of the content including multimedia, geographic, statistical and other data
- ➤ Crowdsourcing
- ➤ Data analysis in social networks
- > Data-intensive applications in cloud and GRID infrastructures
- Data intensive systems infrastructures
- Data mining, knowledge discovery
- Data models: structured, semi-structured, graph, multidimensional and others
- Data storage and indexing
- > Digital curation, preservation, and archiving; data provenance
- Digital Library models, architectures and infrastructures
- Digital resource quality, quality metrics, data cleansing
- ➤ Information security
- Integration, interoperability and mashups of heterogeneous information resources (structured, semi-structured, unstructured)

- > Integration of publishing systems and digital libraries
- ➤ Metadata, ontologies, conceptual modeling
- > Models and tools for massive data parallel analysis
- Perspective projects of Digital Libraries in science and other spheres: approach, technologies and implementation experience
- > Retrieval and analysis of textual and multimedia information
- > Scientometrics in digital libraries
- Semantic aware services; context awareness of services at the information access
- > Semantic structuring of the Digital Libraries content
- > Semantic Web, Linked Data, Web of Data
- Social media and dynamically generated content
- ➤ Technology standards for Digital Libraries
- Tools for development of digital libraries and digital collections
- Virtual environments for research, collaborative information environments
- User modeling, user interfaces, and personalization; recommender systems

Publication of the Proceedings

Conference Proceedings will be published as a collection of full texts of accepted papers, short papers and abstracts of posters, as well as in electronic form on a permanent conference website http://rcdl.ru and in the European repository of the CEUR Workshop Proceedings, to provide for better visibility of RCDL-2014 publications for the international scientific community. In addition, the best reports of the Conference will be recommended for publication (in revised version) in the editions included into the list of VAK.

PhD Workshop

The traditional workshop "Doctoral Research on Information Technologies Related with Digital Libraries" is going to be held during the Conference. Those authors whose submissions have been selected during preliminary reviewing will be given a possibility to present the results of their current research and discuss their strong and weak points of their results with more experienced colleagues. Selected papers will be published in the Conference proceedings. The best papers also will be published in CEUR Workshop Proceedings and will be recommended for publication in journals included in the list of VAK. The chair of the Workshop Program Committee is Alexander Elizarov. An information letter about the PhD Workshop will be distributed in the near future.

Dates and Venue

The Conference will be held from 13 to 16 October 2014 in the town of Dubna (Russia), in the Laboratory of Information Technologies (<u>LIT</u>) of the Joint Institute for Nuclear Research (<u>JINR</u>).

<u>Dubna</u> is a quiet and pleasant town 130 km north of Moscow on the picturesque banks of the Volga river. There is <u>a railway</u> and <u>bus communication</u> between Dubna and <u>Moscow</u>. Detailed information about Dubna can be found at http://www.dubna-oez.ru/eng/.

Submission and presentation

Working languages are Russian and English. Extended abstracts and papers can be in any of them. The Program Committee expects the *original* papers, not published earlier and having a *research orientation*. It is strongly recommended that the languages of the paper and presentation were different, it helps to follow the thread of speech to both Russian and foreign participants.

Extended abstracts of no less than 2000 words should be submitted in PDF or RTF formats to the Program Committee through the website of the Conference. Abstracts should provide a fairly complete picture of the paper content, include a list of references and/or links to Internet resources. The authors of extended abstracts must specify to which Conference scope topics their work is referred. Several suitable areas listed above in the conference topics can be specified simultaneously.

The selection of papers to the Conference is made according to the results of the extended abstracts independent reviewing by three members of the Program Committee. The Program Committee can accept work for presentation as a full report, short message or a poster. The accepted papers should be arranged for publication in the Conference proceedings in compliance with the rules given on the Conference website and submitted to the Program Committee in due time.

RCDL conferences hold face to face. Acceptance of a paper by the Program Committee assumes mandatory registration and participation of at least one of the authors at the conference and personal presentation of this work.

Program committee

Co-chairs

Lydia Kalmykova – Joint Institute for Nuclear Research, Russia Mikhail Kogalovsky – Market Economy Institute, RAS, Russia

Members of the Program Committee (to be extended)

Mark Akoev - Ural Federal University, Russia

Alexander Antonov - LLC "RCO", Russia

Arkady Avramenko – Pushchino Radio Astronomy Observatory, RAS, Russia

José Borbinha - Lisbon University of Technology, Portugal

Pavel Braslavsky - Ural Federal University, SKB Kontur, Russia

Vasily Bunakov - Science and Technology Facilities Council,

Harwell, Oxfordshire, United Kingdom

Boris Dobrov – Research Computing Center of Moscow State University, Russia

Alexander Elizarov – Kazan (Volga Region) Federal University,

Alexander Fazliev – Institute of Atmospheric Optics, RAS, Siberian Branch. Russia

Max Gubin - Google Inc.

Nikolay Kalenov – Library for Natural Sciences of the RAS, Russia Leonid Kalinichenko – Institute of Informatics Problems, RAS, Russia

Thomas Krichel – Open Library Society, Inc., USA & Novosibirsk State University, Russia

Efim Kudashev - Space Research Institute, RAS, Russia

 $Sergey\ Kuznetsov-Institute\ for\ System\ Programming,\ RAS,\ Russia$

Dmitry Lande – Institute for Information Recording, NAS, Ukraine Vladimir Lapshin –Russian State University for the Humanities,

Russia

Olga Lavrenova - Russian State Library, Russia

Henry Lezin - Institute for Economics and Mathematics at St.-

Petersburg, RAS

Vladimir Litvine - Evogh Inc., California, USA

Nataly Lukashevich - Research Computing Center of Moscow State University, Russia

Oleg Malkov - Institute of Astronomy, RAS, Russia

Alexander Marchuk - Institute of Informatics Systems, RAS,

Siberian Branch, Russia

Genis Musulmanbekov - Joint Institute for Nuclear Research, Russia

Igor Nekrestjanov - Intel Corporation, USA

Boris Novikov – St.-Petersburg State University, Russia

Dmitry Paley - Yaroslavl State University, Russia

Sergey Parinov - Central Economic Mathematical Institute, RAS, Russia

Vladimir Pleshko – LLC "RCO", Russia

Galina Proskudina – Institute of Software Systems, NAS, Ukraine

Andreas Rauber - Vienna University of Technology, Austria

Alexander Rogov - Petrozavodsk State University, Russia

Kurt Sandkuhl – Jönköping University, Sweden & Rostock University, Germany

Vladimir Serebryakov - Computing Center of the RAS, Russia

Vladislav Shirikov - Joint Institute for Nuclear Research, Russia

Nikolay Skvortsov - Institute of Informatics Problems, RAS, Russia

Vladimir Smirnov - Yaroslavl State University, Russia

Leonid Sokolinsky - South Ural State University, Russia

Valery Sokolov - Yaroslavl State University, Russia

Sergey Stupnikov - Institute of Informatics Problems, RAS

Alexander Sychev - Voronezh State University, Russia

Alexey Ushakov - University of California, Santa Barbara, USA

Natalia Vassilieva – ZAO Hewlett-Packard AO, Russia

Vladimir Vdovitsyn - Karelian Research Centre, RAS, Russia

Viacheslav Wolfengagen – National Research Nuclear University "MEPhI", Russia

Yuri Zagorulko – Institute of Informatics Systems, RAS, Siberian Branch, Russia

Victor Zakharov - Institute of Informatics Problems, RAS, Russia

Oleg Zhizhimov - Institute of Computational Technologies, RAS,

Siberian Branch, Russia

Sergey Znamensky – Program System Institute, RAS, Russia

Organizing committee

Co-chairs

Vladimir Korenkov – Laboratory of Information Technologies, JINR Victor Zakharov – Institute of Informatics Problems, RAS

Deputy Chairman

Petr Zrelov - Laboratory of Information Technologies, JINR

Members of Organizing Committee

Marina Aristarkhova – LIT, JINR

Galina Volodina – LIT, JINR

Alexander Grafov - LIT, JINR

Natalia Dokalenko - International Cooperation Department, JINR

Tatiana Zaikina - LIT, JINR

Lidia Kalmykova -LIT, JINR

Natalia Krizhanovskaya - Karelian Research Centre, RAS

Genis Musulmanbekov - LIT, JINR

Olga Rumyantseva – LIT, JINR

Elena Fedorova – LIT, JINR

Irina Filozova – LIT, JINR

Steering committee of RCDL conference

Chair Leonid Kalinichenko (Moscow)

Members of steering committee

Arkadiy Avramenko (Pushchino)

Pavel Braslavsky (Yekaterinburg)

Alexander Elizarov (Kazan)

Mikhail Kogalovsky (Moscow)

Sergey Kuznetsov (Moscow)

Alexandr Marchuk (Novosibirsk)

Igor Nekrestyanov (USA)

Vladislav Shirikov (Dubna)

Yury Smetanin (Moscow)

Vladimir Smirnov (Yaroslavl)

Sergey Stupnikov (Moscow)

Vladimir Vdovitsyn (Petrozavodsk)

Victor Zakharov (Moscow)

TPDL/RCDL coordination

Andreas Rauber, Leonid Kalinichenko

Contacts

Postal address: LIT, JINR

141980 Dubna, Moscow region, Russia

E-mail: rcdl2014@jinr.ru Fax: (7 49621) 65-145 Phone: (7 49621) 64-019

Important dates

May 15, 2014 — the submission deadline for extended abstracts, at least 2000 words including references, in Russian or English.

May 20, 2014 — the deadline for applications of tutorials and colocated workshops.

June 15, 2014 — before this date the authors will be notified on the status of their submissions (accepted / rejected).

August 1, 2014 — the deadline for camera-ready versions of the accepted papers.