

Conference on Mathematical Foundations of Informatics

MFOI-2018

July 2-6, 2018, Chişinău, Republic of Moldova

Organizers: Mathematical Society of the Republic of Moldova; Institute of Mathematics and Computer Science, Chisinau, Moldova; Taras Shevchenko National University of Kyiv, Ukraine; Alexandru Ioan Cuza University of Iasi, Romania; East Computers, SRL.

Venue:

Hotel&Tourist Resort "VATRA"

Address:

R. Moldova, Vadul lui Voda, Dniester Park

Timetable and Program

Tuesday, July 3

08:45– 09:30 **Registration**- the hotel lobby

09:30–09:45 **Opening ceremony**

Chairs: Svetlana Cojocaru, Mykola Nikitchenko

09.45-10.45 Invited talk. **Volodymyr G. Skobelev**, Volodymyr V. Skobelev
Cyber-Physical Systems: challenges and achievements

10.45-11.15 **Coffee Break**

11.15-11.45 **Mitrofan M. Cioban, Ivan A. Budanaev**
Scattered and Digital Topologies in Image Processing

11.45-12.15 Mykola Nikitchenko, Stepan Shkilniak
Towards Representation of Free Logic as Logic of Partial Quasiary Predicates

12.15–12.45 Svetlana Cojocaru, Constantin Gaidric, Galina Magariu, Tatiana Verlan
Analysis and preparation of data from Stroke.md database when creating a stroke prediction model

12.45-13.05 Matthias Dehmer
Information-theoretic Measures for Graphs

13.05 -14.30 LUNCH

Chairs: Mitrofan Cioban, Constantin Gaidric

14.30–15.30 Invited talk. Alexei Y. Muravitsky
Expert Systems and Semantic Information

15.30–16.00 Coffee break

16.00-16.20 Vladimir Popukaylo
The projects management system churn prediction

16.20-16.40 Constantin Gaidric, Svetlana Cojocaru, Stefan Pickl, Sorin Nistor, Iulian Secrieru, Olga Popcova, Doina Bein, Diana Cimpoesu
A Concept for a Decision Support Framework for the Management of Complex Mass Casualty Situations at Distribution Points

16.40-17.00 Alexander Lyaletski
Tree-like Refutation Search and Model Elimination Method

17.00-17.20 Rodica Cujbă, Andrei Rusu
On interoperability of research information based on CERIF in Republic of Moldova

17.20-17.40 Olesea Caftanatov
An Anthropomorphic Avatar-based Approach for Virtual Tutoring Software

Wednesday, July 4

Chairs: Ioachim Drugus, Volodymyr G. Skobelev

9.30-10.30 Invited talk. **Ferucio Laurențiu Țiplea**
Multi-linear Maps in Cryptography

10.30-11.00 Nadeghda Malyutina, Alexandra Scherbacova, Victor Shcherbacov
Some generalisations of Markovsky algorithm on i -invertible groupoids

11.00–11.20 Coffee break

11.20–11.40 Alexander Moldovyan, Nicolay Moldovyan, Victor Shcherbacov
Non-commutative 6-dimensional associative algebras of two different types

11.40–12.00 Serghei Ohrimenco, Grigori Borta
The challenges of shadow information economics

12.00–12.20 Eugene Kuznetsov
New Vigenere cipher modification

12.20–12.40 Vladimir Chernov, Alexander Moldovyan, Victor Shcherbacov

On some groupoids of order three with Bol-Moufang type of identities

12.40–13.00 Eugeniu Gârlă

Optimal algorithm for optimization problems with special restrictions

13.00–14.30 LUNCH

Chairs: Adrian Iftene, Mircea Petic

14.30–15.00 Ioachim Drugus

Towards an Algebraic Set Theory for the Formalization of Data Structures

15.00–15.20 Eugene Kuznetsov, Vladimir Izbash, Olga Izbash

Algebraic representation of generalized boolean algebras

15.20–15.40 Coffee break

15.40–16.00 Daniela Gifu, Diana Trandabăt

Diachronic Topic Modelling of Newspapers Articles

16.00–16.20 Svetlana Cojocar, Alexandru Colesnicov, Ludmila Malahov, Tudor Bumbu, Lyudmila Burtseva, Valentina Demidova

On technology of free access to the characteristic cultural heritage in the form of old printed texts

16.20–16.40 Elena Şuşnea, Adrian Iftene

The Significance of Online Monitoring Activities for the Social Media Intelligence (SOCMINT)

16.40–17.00 Mircea Petic

Quality of data for mitigation of social disaster effects

17.00–17.20 Inga Țițchiev

Modeling of the movement of human flows in the process of evacuation from multi-storey buildings by Hierarchical Petri Nets

17.20–17.30 Closing

Thursday, July 5

09.30–17.00 SOCIAL PROGRAM, EXCURSION TO OLD ORHEI AND „CHÂTEAU VARTELY” WINERY



COMMITTEES

Chair:

Svetlana Cojocaru, Director of Institute of Mathematics and Computer Science (Chisinau, Moldova)

co-Chairs:

Mykola Nikitchenko (Kyiv, Ukraine), Ioachim Drugus (Chisinau, Moldova), Andrian Iftene (Iasi, Romania).

Program Committee:

Artiom Alhazov (Chisinau, Moldova), Alexei Averkin (Moscow, Russia), Bruno Buchberger (Linz, Austria), Balder ten Cate (Santa Cruz, USA), Gabriel Ciobanu (Iasi, Romania), Constantin Ciubotaru (Chisinau, Moldova), Alexander Colesnicov (Chisinau, Moldova), Razvan Diaconescu (Bucuresti, Romania), Maria Duca (Chisinau, Moldova), Constantin Gaindric (Chisinau, Moldova), Tamas Gergely (Budapest, Hungary), Daniela Gifu (Iasi, Romania), Jeroen Groenendijk (Amsterdam, Netherlands), Eberhard Guhe (Shanghai, China), Adrian Iftene (Iasi, Romania), Ievgen Ivanov (Kyiv, Ukraine), Tudor Jebelean (Linz, Austria), Michael Kohlhase (Bremen, Germany), Alexander Lyaletski (Kyiv, Ukraine), Alexandre Lyaletsky (Kyiv, Ukraine), Fairouz Kamareddine (Edinburgh, Scotland), Maurice Margenstern (Paris, France), Gheorghe Paun (Bucharest, Romania), Vít Punčochár (Prague, Czech), Floris Roelofsen (Amsterdam, Netherlands), Vladimir Rogojin (Turku, Finland), Victor Scerbacov (Chisinau, Moldova), Volodimir Skobelev (Kiyv, Ukraine), Geoff Sutcliffe (Miami, USA), Jose M. Turull-Torres (Buenos Aires, Argentina; Wellington, New Zealand), Serghei Verlan (Paris, France), Andrei Voronkov (Manchester, UK).

Organizing Committee:

Tudor Bumbu, Liudmila Burtseva, Olesea Caftanatov, Svetlana Cojocaru, Irina Gheorghita, Daniela Gifu, Galina Magariu, Ludmila Malahov, Iulian Secrieru, Tatiana Tofan, Inga Titchiev, Lidia Ursu, Tatiana Verlan.