Conference on Mathematical Foundations of Informatics

MFOI-2017

November 9-11, 2017, Chişinău, Republic of Moldova

Organizers: **Mathematical Society of Republic of Moldova and Institute of Mathematics and Computer Science of the Academy of Sciences of Moldova; Taras Shevchenko National University of Kyiv, Ukraine; the University of Academy of Sciences of Moldova; East Computers, SRL, Chisinau, Moldova.**

Timetable

Wednesday, November 8

REGISTRATION:
14.00 - 17.00 Institute of Mathematics and Computer Science, room 343, 344, Address: 5, Academiei str., Chişinău

Thursday, November 9

Institute of Mathematics and Computer Science (IMCS), room 340. Address: 5, Academiei str., Chişinău

08.30 – 09.30 REGISTRATION, IMCS lobby

Special session dedicated to the 70th anniversary of

Florin Gheorghe Filip

09.30 –10.00 Opening Session
10.00– 10.45 Plenary Session
10.45 – 11.00 Coffee break
11.00 – 13.00 WORK IN SECTION
13.00 – 14.00 LUNCH
14.00 – 15.15 WORK IN SECTION
15.15 – 15.30 Coffee break
15.30 – 18.30 WORKSHOP *Software applications of the type "Self Management Disease": solutions and prospects"*

Friday, November 10

Institute of Mathematics and Computer Science, room 340.
Address: 5, Academiei str., Chişinău

The IVth edition of "Prof. Yuri Rogozhin" seminar

09.30 – 11.00 WORK IN SECTION

11.00 – 11.15 Coffee break

11.15 – 12.30 WORK IN SECTION

12.30 – 14.00 LUNCH

14.00 – 15.00 WORK IN SECTION

15.00 – 15.15 Coffee break

15.15 – 18.30 WORK IN SECTION

Saturday, November 11

09.30 – 17.00 SOCIAL PROGRAM, EXCURSION TO MANUC BEY MANOR

S C H E D U L E

Thursday, November 9

Institute of Mathematics and Computer Science, room 340.
Address: 5, Academiei str., Chişinău

Special session dedicated to the 70th anniversary of Florin Gheorghe Filip

09.30 – 10.00 OPENING SESSION

    •Acad. Gheorghe Duca
    •Corr. memb. Constantin Gaindric

10.00 – 10.45 PLENARY SESSION, **Chairman: Svetlana Cojocaru**

•**Florin Gheorghe Filip**
Automation, Computer Supported Decision-Making, and The New Enabling Information and Communication Technologies (invited talk)

10.45 – 11.00 Coffee break

11.00 – 12.55 PLENARY SESSION, **Chairman: Svetlana Cojocaru**

•**Mykola Nikitchenko, Stepan Shkilniak**
Towards Representation of Classical Logic as Logic of Partial Quasiary Predicates

•**Mitrofan Cioban**, **Ivan Budanaev**
Measures of Similarity on Monoids of Strings

•**Ievgen Ivanov, Artur Kornilowicz, Mykola Nikitchenko**
On Implementation of the Composition-nominative Approach to Program Formalization in Mizar System (invited talk)

•**Marius Balas, Valentina Balas**
Fuzzy Interpolative Methodology and Applications

•**Bogdan Aman, Gabriel Ciobanu**
Sharing Knowledge Network (on line)

•**Andrei Alexandru, Gabriel Ciobanu**
Results Regarding Cardinalities in FSM (on line)

13.10 – 13.50 LUNCH

14.00 – 15.15 WORK IN SECTION, **Chairman: Mitrofan Cioban**

•**Ioachim Drugus**
Towards an Algebraic Explication of Quantity

•**Alexander Moldovyan, Nicolay Moldovyan, Victor Shcherbacov**
Non-commutative finite associative algebras of 2-dimension

•Vadim Grinshpun
Analysis of data selection criteria for a given visualization method. (on line)

•Olesea Caftanatov, Tudor Bumbu
Knowledge level assessment by using Machine learning

15.15 – 15.30 Coffee break

15.30 – 18.30 WORKSHOP

Software applications of the type "Self Management Disease": solutions and prospects

Chairman: Constantin Gaindric

•Lucian Nita, Sinica Alboaie, Paul Herghelegiu
Software Application for Interconnecting PACS systems

•Iulian Secrieru, Olga Popcova, Elena Gutuleac
Quantification and Assessment of Diffuse Liver Diseases using Deep Data Analysis

- **Round table. Chairman: Constantin Gaindric**

Friday, November 10

Institute of Mathematics and Computer Science, room 340.
Address: 5, Academiei str., Chişinău

The IVth edition of "Prof. Yuri Rogozhin" seminar

09.30 – 11.00 WORK IN SECTION, **Chairman: Mykola Nikitchenko**

•Alexander Lyaletski
*EA-*Style *Mathematical Text Processing in English SAD System*

•Alexandre Lyaletsky
On Correct Computations on Fuzzy Data

•Artiom Alhazov, Rudolf Freund, Sergiu Ivanov, Sergey Verlan
Sequential Polarized Tissue P Systems with Vesicles of Multisets (on line)

•Artiom Alhazov, Rudolf Freund, Sergiu Ivanov
P Systems and the Concept of Fairness (on line)

•Artiom Alhazov, Rudolf Freund, Sergiu Ivanov
P Systems with Random RHS Exchange (on line)

11.00 – 11.15 Coffee break

11.15 – 12.45 WORK IN SECTION, **Chairman: Ioachim Drugus**

•Vladimir Rogojin, **Krishna Kanhaiya, Wu Kai Chiu, Cristian Gratie, Keivan Kazemi, Eugen Czeizler, Ion Petre**
Controlling directed protein interaction networks, an overview

•Michael Kohlhase
About the Open Markup Format for Mathematical Documents OMDoc (invited talk, on line)

•E. Csuhaj-Varju, S. Verlan
Computationally Complete Generalized Communicating P Systems with Three Cells (on line)

•Gheorghe Capatana
Some Techniques to Develop of the Expert Systems

•Lyudmila Burtseva
On application of P system based algorithms for diachronic text analysis

12.45 – 14.00 LUNCH

14.00 – 15.00 WORK IN SECTION, **Chairman: Inga Țițchiev**

•Daniela Gîfu
Malaria Detection System

•**Cătălina Mărănduc, Victoria Bobicev**
Non Standard Treebank Romania and Republic of Moldova in the Universal Dependencies

•**Illia Savchenko**
Modeling Disasters Using Networks of Morphological Tables

•**Mircea Petic**, **Victor Cozlov**
Determining emotional classifiers for social disasters texts

15.00 – 15.15 Coffee break

15.15 – 18.30 WORK IN SECTION, **Chairman: Alexander Lyaletski**

•**Vladik Kreinovich**
Dealing with Uncertainties in Computing: from Probabilistic and Interval Uncertainty to Combination of Different Approaches, with Application to Geoinformatics, Bioinformatics, and Engineering (invited talk, on line)

•**Alexei Muravitsky**
Oracle as Modality: Two Examples (on line)

•**Inga Titchiev**
Approaches to the modeling of the movement of human flows by HLPNs in case of disaster

•**Ludmila Malahov**, **Svetlana Cojocaru, Alexandru Colesnicov, Tudor Bumbu**
On Recognition of Manuscripts in the Romanian Cyrillic Script

•**Victoria Rotaru**, **Iulian Secrieru, Carolina Țambală**
Determination of thresholds for liver disorders severity in cirrhotic PHT

•**Ana Nastasiu**
Graphical representation of statistical data as an alternative method of ecodopplerographic score

•Victor Seiciuc
Some efficient Game Development Techniques for Mobile Devices

•Elena Socolov
Development of Expert System

Saturday, November 11

09.30 – 17.00 SOCIAL PROGRAM, EXCURSION TO MANUC BEY MANOR

MANUC BEY ESTATE AND

MANOR HOUSE

Programm Committee

Svetlana Cojocaru (Chair; Chisinau, Moldova), Mykola Nikitchenko (co-Chair; Kiyv, Ukraine), Ioachim Druguş (co-Chair; Chisinau, Moldova), 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

Liudmila Burtseva, Silvia Cebanu, Svetlana Cojocaru, Irina Gheorghita, Dorina Luca, Galina Magariu, Ludmila Malahov, Olga Popcova, Iulian Secrieru, Natalia Spac, Tatiana Tofan, Inga Titchiev, Lidia Ursu, Tatiana Verlan.