NIT 2013 PROGRAM

25th - 28th September 2013 (Sala de Grados – EUI) Madrid, Spain

Tuesday 24th

15:00 - 17:00   Registration

Wednesday 25th

Co-located with **Second International School on Biomolecular and Biocellular Computing (ISBBC'13**

FIRST SESSION	
9:00-9:30	Opening Session
9:30-11:00	**Invited Speaker:** Victor Mitrana - **"Bio-operations over strings"**
11:00-11:30	Coffee Break
11:30-13:00	**Invited Speaker:** José M. Sempere – **"Network of Bio-inspired Processors"**
13:00-14:00	**Invited Speaker:** Fernando Arroyo and Sandra Gómez - **"New Variant of NEPs to Model the Functioning of Living Cell**
14:00-15:30	Lunch

SECOND SESSION	
15.30-16.30	**Invited Speaker:** Krassimir Markov - **"Practical aspects of NL-addressing"**
16:30-	**Paper Presentation: "Experiments for NL-**

17:00	**storing of small, middle-size and large datasets"** Krassimira Ivanova, Koen Vanhoof, Krassimir Markov, Vitalii Velychko
17:00-18:00	**Discussion ITHEA members**

Thursday 26th

FIRST SESSION	
Moderator: Luís Fernando de Mingo López	
10:30-11.15	**Invited Speaker:** Miguel Ángel Martínez del Amor – **"Acceleration of P Systems Simulation with GPU Computing"**
11:15-11:45	**Coffee Break**
11:45-13:00	**Papers Presentation**
	"Modeling of reasoning in intelligent decision support systems by integration of methods based on case-based reasoning and inductive notions formation": Eremeev A.P, Fomina M.V.
	"A system Approach to Solving Foresight Problems on the Basis of Delphi Method": Nataliya Pankratova, Lyudmila Malafeeva
	"MPLS Network Structural Synthesis with Application of Modified Genetic Algorithm": Yuriy Zaychenko, Helen Zaychenko
13:00-14:00	**Invited Speaker:** Pedro Marijuan – **"On the Natural Structures of Information Processing**
14:00-15:00	**Lunch**

SECOND SESSION	
Moderator: Fernando Arroyo	
15:00-15:45	**Invited Speaker:** Ángel Goñi – Centro Nacional de Biotecnología, CSIC (Spain): **"Logic programming in cells"**
15:45-16:30	**Invited Speaker:** Karl Javorszky: **"Essay on Order"**
16:30-16:45	**Coffee Break**
16:45-18:15	**Papers Presentation**
	"A new method for the binary encoding and hardware implementation of metabolic pathways": Rafael Lahoz, C. Recio Rincón, P. Cordero, J. Castellanos
	"About an Approach to Model Development of Man-computer Interaction": Arseniy Bakanov, Nina Bakanova, Tasho Tashev
	"About Usage Possibility of Principles of Excitations Transmission by Nerve Fibers for Telecommunications": Galina Gayvoronska, Maxim Solomitsky
	"Human and Telecommunication Technologies Life Cycles Comparison": Galina Gayvoronska, Illia Ganytskyi, Petr Yatsuk
18:15-18:30	**Closing Session**

Friday 27th

9:00	**Trip to Toledo**

SCOPE AND TOPICS OF INTEREST

Natural Computing can be broadly defined as the development of computer programs and computational algorithms using metaphorical inspiration from system and phenomena that occur in the natural world. Fundamentals of Natural Computing: Basic Concepts, Algorithms, and Applications present a wide-ranging survey of novel techniques and important applications of nature-based computing. The goal of NIT 2013 is to offer a platform to critically assess present findings in the field, and to outline future developments in nature-inspired computing.

Topics

- ✓ Cellular Computing, DNA Computing, Evolutionary Computation, Membrane Computing, Molecular Computing, Neural Computing, Quantum Computing

- ✓ Bioinformatics, Data Mining and Knowledge Discovery, Decision Making and Decision Support Systems, Evolvable Hardware, Information Retrieval, Knowledge Management, Multi-agent Structures and Systems, Natural Language Processing, Robotics, Synthetic Biology, Web Intelligence

CONFERENCE ORGANIZERS

ITHEA

ITHEA International Scientific Society

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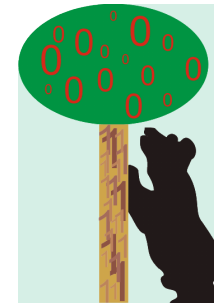http://www.ithea.org   e-mail: info@foibg.com

POLITÉCNICA

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Institute of Information Theories and Applications FOI ITHEA (Bulgaria)
Institute for Informatics and Automation Problems, Armenian Academy of Sciences (Armenia)
Association of Developers and Users of Intelligent System (Ukraine)
Dorodnicyn Computing Centre of the Russian Academy of Sciences (Russia)
Spanish Network on Biomolecular and Biocellular Computing (Spain)

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