

ITHEA International Scientific Society



XV-th anniversary!

ITA 2012

*XV-th Joint International Scientific Events on
Informatics*

*June 18 - July 05, 2012, Varna, Bulgaria
September - October, 2012, Ukraine, Poland, Spain,
www.ithea.org*

ITA 2012 is supported by:



The ITHEA International Journal
"Information Theories and Applications"



The ITHEA International Journal
"Information Technologies and Knowledge"



The ITHEA International Book Series
"Information Science and Computing"



The ITHEA International Review Journal
"Information Research and Engineering"

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ITA 2012

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ITA 2012 is organized by:

- ITHEA International Scientific Society
- Association of Developers and Users of Intelligent Systems (Ukraine)
- FIS Foundations of Information Science (Spain)
- Spanish Network on Biomolecular and Biocellular Computing (Spain)
- National Academy of Sciences of Ukraine
- Federation of the Scientific - Engineering Unions /FNTS/ (Bulgaria)

- Institute of Information Theories and Applications FOI ITHEA (Bulgaria)
- V.M.Glushkov Institute of Cybernetics of NASU (Ukraine)
- Institute of Mathematics and Informatics, BAS (Bulgaria)
- St.Petersburg Institute for Informatics and Automation of RAS (Russia)
- Instituto Aragonés de Ciencias de la Salud (Spain)
- Dorodnicyn Computing Centre of the Russian Academy of Sciences (Russia)
- Institute for Informatics and Automation Problems, Armenian Academy of Sciences (Armenia)
- Institute of Mathematics of SD RAN (Russia)
- Institute of Mathematical Problems and Systems of NASU (Ukraine)

- Varna Free University "Chernorizets Hrabar" (Bulgaria)
- Taras Shevchenko National University of Kiev (Ukraine)
- Universidad Politecnica de Madrid (Spain)
- Rzeszow University of Technology (Poland)
- Kharkiv National University of Radio Electronics (Ukraine)
- Hasselt University (Belgium)
- University of Calgary (Canada)
- Ben-Gurion University (Israel)
- Astrakhan State University (Russia)

General sponsor: FOI Bulgaria

Accommodation for ITA 2012 Summer Session

Hotel "PANORAMA" in the resort St. Constantine & Helena, Varna, Bulgaria:

http://www.panoramahotel.bg/home_eng.html

http://www.foibg.com/conf/add_files/map-ke-panorama.jpg

There are various three and four stars hotels in the complex St.Constantine, which are at walking distance to the hotel Panorama. The preferred four stars hotels are:

- *Azalia*: <http://www.azaliahotel.com/en.html>

- *Sirius beach*: <http://www.siriusbeach.com/>

- *Dolphin Marina*: <http://www.beachbulgaria.com/stellias/dolphinmarina.shtml>

- as well as all other hotels from the *Grand Hotel Varna Chain*:

<http://www.grandhotelvarna.com/>

NOTE: For these hotels participant have to make reservation and payment by himself.

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ITA 2012 Main Scientific Events

iii 2012		Third International Conference Information - Interaction – Intellect
CFDM 2012		IV-th International Conference Classification, Forecasting, Data Mining
i.Tech 2012		X-th International Conference Information Research and Applications
GIT 2012		X-th International Conference General Information Theory
ISK 2012		IV-th International Conference Information in Scientific Knowledge
IM 2012		International Conference Informational Modelling
MDA 2012		International Conference Mathematics of Distances and Applications
MeL 2012		VII-th International Conference Modern (e-) Learning
KDS 2012		XVIII-th International Conference Knowledge - Dialogue - Solution
INFOS 2012		V-th International Conference on Intelligent Information and Engineering Systems
NIT 2012		Third International Conference Natural Information Technologies
ISSI 2012		VI-th International Summer School on Informatics

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Plenary Days' Preliminary Time Table

ITA 2012, Summer Session, Varna, Bulgaria

[Hotel "Panorama" in the St. Constantine & Helena resort.](#)

	18.06.12 Monday	19.06.12 Tuesday	20.06.12 Wednesday	21.06.12 Thursday	22.06.12 Friday	23.06.12 Saturday	24.06.12 Sunday
10:00 – 11:30	iii	iii	CFDM	Excursion ITHEA GALA EVENING	CFDM	iTech	iTech
11:30	Break	Break	Break		Break	Break	Break
12:00 – 13:00	iii	ISSI	CFDM		ISSI	iTech	ISSI
13:00	Break	Break	Break		Break	Break	Break
15:00 – 16:20	iii	iii	CFDM		CFDM	iTech	iTech
16:20	Break	Break	Break		Break	Break	Break
16:40 – 18:00	iii	iii	CFDM		CFDM	iTech	iTech
<i>Working Language</i>	<i>Russian</i>				<i>English</i>		

	25.06.12 Monday	26.06.12 Tuesday	27.06.12 Wednesday	28.06.12 Thursday	29.06.12 Friday	30.06.12 Saturday	01.07.12 Sunday
10:00 – 11:30	GIT	GIT	ISK	ISK	IM	IM	IM
11:30	Break	Break	Break	Break	Break	Break	Break
12:00 – 13:00	ISS on FIS	ISS on FIS	ISK	ISK	IM	IM	ISSI
13:00	Break	Break	Break	Break	Break	Break	Break
15:00 – 16:20	GIT	GIT	ISK	ISK	IM	IM	IM
16:20	Break	Break	Break	Break	Break	Break	Break
16:40 – 18:00	GIT	GIT	ISK	ISK	IM	IM	IM
<i>Working Language</i>	<i>English</i>					<i>English and Russian</i>	

	02.07.12 Monday	03.07.12 Tuesday	04.07.12 Wednesday	05.07.12 Thursday
10:00 – 11:30	MDA	MDA	MDA	MDA
11:30	Break	Break	Break	Break
12:00 – 13:00	MDA	MDA	MDA	MDA
13:00	Break	Break	Break	Break
15:00 – 16:20	MDA	MDA	MDA	MDA
16:20	Break	Break	Break	Break
16:40 – 18:00	MDA	MDA	MDA	MDA
<i>Working Language</i>	<i>English</i>			

ITA 2012 Autumn Session

KDS 2012, September 10-13, Ukraine

MeL 2012, September 14-15, Ukraine

INFOS 2012, September 18-22, Rzeszow, Poland

NIT 2012, October 02-October 05, Madrid, Spain

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Deadlines for ITA 2012

For MDA which will be held in Varna, Bulgaria, 01-05 July 2012

February 29, 2012: submission of **final paper** by the [ITHEA ISS Submission Web System: http://ita.ithea.org](http://ita.ithea.org)

March 31, 2012: notification of the **paper acceptance** by the [ITHEA ISS Submission Web System](http://ita.ithea.org)

April 30, 2012: submission of **registration forms** and **visa application forms** by e-mail: info@foibg.com

For CFDM, i.Tech, III, GIT, MeL which will be held in Varna, Bulgaria, June 2012

March 31, 2012: submission of **final paper** by the [ITHEA ISS Submission Web System: http://ita.ithea.org](http://ita.ithea.org)

April 15, 2012: notification of the **paper acceptance** by the [ITHEA ISS Submission Web System](http://ita.ithea.org)

April 30, 2012: submission of **registration forms** and **visa application forms** by e-mail: info@foibg.com

For KDS which will be held in Ukraine, September 2012

July 31, 2012: submission of **final paper** by the [ITHEA ISS Submission Web System: http://ita.ithea.org](http://ita.ithea.org)

August 01, 2012: notification of the **paper acceptance** by the [ITHEA ISS Submission Web System](http://ita.ithea.org)

August 15, 2012: submission of **registration forms** by e-mail: info@foibg.com

For INFOS, Poland, 18-22.09.2012

please, follow the link <http://infos.prz.edu.pl>

For NIT, Madrid, Spain, 02.10-05.10.2012

July 30, 2012: submission of **final paper** by the [ITHEA ISS Submission Web System: http://ita.ithea.org](http://ita.ithea.org)

September 01, 2012: notification of the **paper acceptance** by the [ITHEA ISS Submission Web System](http://ita.ithea.org)

September 10, 2012: submission of **registration forms** and **visa application forms** by e-mail: info@foibg.com

Manuscripts

Manuscripts from members of ITHEA International Scientific Society (ITHEA ISS) will be preferably included in the events of ITA 2012.

Membership of ITHEA ISS is free and may be done by registration at the www.ithea.org

Manuscripts need to be formatted in DOC or TeX formats according the sample sheets given at:

- DOC template: http://www.foibg.com/conf/ithea_manuscripts_rules-2012_doc_template.doc

- TeX template: http://www.foibg.com/conf/ithea_manuscripts_rules-2012_tex_template.tex.

Accepted manuscripts will be published as follow:

- **surveys in English** from 12 up to 20 pages will be published in the International Journal "Information Theories and Applications"[®] (IJ ITA) or International Journal "Information Technologies and Knowledge"[®] (IJ ITK);

- **regular papers in English or Russian** from 4 up to 12 pages will be published in specialized thematically organized collections in the International Book Series "Information Science and Computing" (IBS ISC);

- **papers in English less than 4 pages** will be assumed as extended abstracts and will be published in the ITHEA ISS International Review Journal "Information Research and Engineering";

- **books** or specialized thematically organized collections will be published in the International Book Series "Information Science and Computing" (IBS ISC).

Abstracts in English or Russian of manuscripts published by ITHEA are available online at the ITHEA ISS Digital Repository and Indexing System: <http://idr.ithea.org>.

Responsibility for manuscripts published in ITHEA International Journals and Book Series belongs to authors. Please *get permission to reprint* any copyrighted material.

Submission

The camera-ready copy of the manuscript should be received by the ITHEA Journal Submission System (<http://ij.ithea.org>) or respectively by the ITHEA Conference Submission System (<http://ita.ithea.org>); e-mail for questions: info@foibg.com.

Please observe the rules and deadlines !

Submit registration cards and visa forms to: Krassimir Markov, e-mail: info@foibg.com

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Fees

ITA 2012 Registration Fee is **EURO 240** or **480 Leva** per paper.

Registration fee needs to be paid for every paper, included in the conference program.

Registration fee includes participation fee *for one person* and permits receiving one exemplar of the issues of the conference in which the paper has been published.

ITHEA ISS Registration Fee is **EUR 140** or **280 Leva**. It is permitted for the **paper** for Summer Session, Varna, Bulgaria, which meets the following requirements:

- the paper is *not financed by any scientific project or other source*;
- the authors are members of ITHEA International Scientific Society (ITHEA ISS). Membership of ITHEA ISS is free and may be done by registration at the www.ithea.org.
- the paper contains the acknowledgement:

"The paper is published with financial support by the project ITHEA XXI of the Institute of Information Theories and Applications FOI ITHEA (www.ithea.org) and the Association of Developers and Users of Intelligent Systems ADUIS Ukraine (www.aduis.com.ua)."

No special requests or contracts are needed.

Participation fee is **EURO 60** or **120 Leva**.

Accompanying persons pay only participation fee.

Participation fee does not cover the price of the proceedings of the conference.

Proceedings' prices:

Proceedings of the ITA 2012 will be published in several separate books of the **IBS ISC** as well as in several issues of the ITHEA International Journals. Usually, papers from given conference are published in more than one book.

One ITHEA book costs **EUR 18** or **36 Leva**. One ITHEA Journal number costs **EUR 12** or **24 Leva**.

Please, note that publication fee does not include post expenses. Post expenses per book are **EUR 18** or **36 Leva**.

Bank accounts

The registration fee in **EURO** should be paid to:

Регистрационната такса в **български лева**
следва да се плати на:

IBAN: **BG60 BPBI 7922 1437 9857 01**;
BIC: **BPBI BGSF**;
Bank name: **Eurobank EFG Bulgaria AD**
Account holder: **FOI Consult Ltd.**

IBAN: **BG92 UBBS 8423 1010 2639 16**;
BIC: **UBBS BGSF**;
Банка: **ОББ, клон "кн. М.Луиза", София**
Фирма: **ФОИ-Комерс**

All bank commissions must be paid by the sender!
Всички банкови комисионни следва да се платят от изпращача!

Please send by e-mail the data for the Organization for Invoice: Name of the organization; VAT-number; Address; Name of the person for the invoice; Comment (if you have some special requirements for the invoice – for instance including the project number in the text of the invoice, etc.)

The originals of the invoices will be received at the conference desk.

For contacts:

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Sandra Gómez
sgomez@eui.upm.es



i-i-i 2012

Third International Conference

Information - Interaction - Intellect

June 18 - 19, 2012, Varna (Bulgaria)

Aims and Scope

The conference is devoted to discussion of current research and applications regarding the intelligent systems development:

Topics of interest

- AI in Risk Management and GMES
- Decision Making
- NL Text Processing
- Intelligent Technologies in Control and Design
- Multi-agent Structures and Systems
- Neural Networks

Steering Committee

Krassimir Markov (Bulgaria)
Vitalii Velychko (Ukraine)

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Program Committee

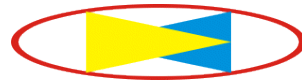
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Yury Zaychenko (Ukraine)

Language

The official languages of the Conference are Russian and English.
Work language at the conference time is Russian.



CFDM 2012

IV-th International Conference

Classification, Forecasting, Data Mining

June 20 - 21, 2012, Varna (Bulgaria)

Aims and Scope

The conference is devoted to the current research and applications in the fields of Classification, Clustering, Pattern Recognition, Forecasting, Features Processing, Transformations, Data Mining, and Knowledge Discovery.

Topics of interest

Pattern Recognition and Forecasting
Machine Learning
Data Mining
Classification and Clustering

Inductive Modelling
Features Processing and Transformations
Applications
Image, Speech, Document and Signal Analysis
Knowledge-Based Decision Support Systems

Steering Committee

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Language

The official languages of the Conference are Russian and English.
Work language at the conference time is Russian.

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i.Tech 2011

X-th International Conference

Information Research and Applications

June 23 - 24, 2012, Varna (Bulgaria)

Aims and Scope

The conference is devoted to discussion of current research and applications regarding the basic directions of computer science.

Topics of interest

- Applied Program Systems
- Business Informatics
- Cyber Security
- Hyper Technologies
- Information Modelling
- Information Systems
- Multimedia Systems
- Distributed and Telecommunication Systems
- Quality of the Programs
- Software Engineering

Steering Committee

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Language

The official languages of the Conference are English and Russian.
Working language at the conference time is English.



GIT 2012

X-th International Conference

General Information Theory

June 25 - 26, 2012, Varna (Bulgaria)

Aims and Scope

The conference objective is to present and discuss current achievement in the fields of the General Information Theory.

General Information Theory (GIT) is considered here not only as a pure theoretical discipline. While matter and energy are the foundation of material World, information is the foundation of the mental world as well as of the interactions in alive beings and within their communities. It is the leading factor in evolution and genetics. It is the basis of intellectual activity. Studying intelligence, we should take broader approach discovering the role of information, generally speaking, in life. The time has come to work out more uniform and general, deeper understanding of information processes which support the noosphere.

In this, broader sense, we should again and again turn our attention to the philosophy, interrelations between material and mental, correlate the notion of information in communication, biology, humanitarian areas and the physics of micro world.

We strongly believe that the progress in AI is tightly tied with our deeper understanding of informational processes, in general. The conference is dedicated to this broad issue.

Topics of interest

Include, but are not limited to the main areas of GIT: (1) Theory of the Information, (2) Theory of the Information Subject (INFOS), and (3) Theory of the Information Interaction (INFORACTION):

Philosophy

- Philosophical background: material and mental – their coexistence and cooperation; the role of humanitarian and natural science knowledge
- Creation of paradigms by intellectual systems
- Information and knowledge; information and life

Cognitology, Gnoseology and Semiotics

- Theory and methodology of World cognition by intellectual systems and communities; intellectual instruments of cognition: hypothesis, theories, experimental verification and falsification, role of knowledge systems: knowledge, experience, beliefs, conventions, prejudices, religions, myths, formal and metaphorical reasoning; consciousness and selfconsciousness
- Semiotics of knowledge acquisition and model construction
- Evolution and informational processes

Modern Physics

- Physics of information processes and informational background of physics
- What give quantum mechanics and other theories of microworld to our understanding of information exchange; principle of non locality, “spooky action at a distance”

Noosphere

- **Noosphere and its informational component, simulated objects with different noosphere statuses**
- AI systems' creation within the frame of integrated interaction with environment and goal oriented activity

Humanitarian Aspects

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- Modeling Informational interaction in Nature and society: physical, social systems (psychology, egregors, sociopsychology) and beyond

Steering Committee

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Language

The official languages of the conference are English and Russian.

Working language at the conference time is English with translation to/from Russian.

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ISK 2012

Forth International Conference

Informatics in the Scientific Knowledge

June 27 – 29 , 2012, Varna, Bulgaria

Conference organizers

Varna Free University “Chernorizets Hrabar”
The Institute of Mathematics and Informatics at the Bulgarian Academy of Sciences

Steering Committee

Anna Nedyalkova
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Krasimirs Manev (Bulgaria)	Todor Stoilov (Bulgaria)
Krasimir Markov (Bulgaria)	

Aims and Scope

The achievements in application of informatics and information technologies in scientific knowledge will be discussed in the presented papers. Special attention will be paid to the information support in teaching and research work.

Topics of interest

Informatics in the Economics, Management and Culture
Informatics in the Public Administration, Law and Corporative Security
Informatics in Engineering and Technologies
Informatics in Education
Mathematical Methods in Informatics

On the plenary sessions there will be carried out and discussed common theoretical problems of informatics in the scientific knowledge /epistemological, philosophical and practical aspects/.

Conference Location

The Conference will take place from June 27 – 29 , 2012 at Varna Free University.

Language

Official languages – Bulgarian and English.

Languages of publication: English



IM 2012

International Conference

Informational Modelling

June 28 - July 01, 2012, Varna (Bulgaria)

Aims and Scope

The conference is devoted to the current research in the fields of concepts, methods, languages and tools of Informational Modelling and Simulation and its applications.

The aim of the Conference is exchange the ideas and expertise among experts in industry, research and education and not formal coordination of their efforts respecting Information Society challenges.

Topics of the conference

1. Informational Modeling (IM) and Simulation (IM&S) - Concepts, Paradigms, Approaches and Languages.
 - Modeling and Simulation (M&S) Body of Knowledge.
 - Knowledge Based IM&S. IM&S languages.
 - IM&S Heterogeneous Structures and Scalability. High Level Architecture (HLA), Agent Based IM&S.

2. IM&S Efficiency Enhancements.
 - Methods for Efficiency Estimation, Comparison and Enhancement. Cooperative, Parallel and Distributed IM&S Efficiency.
 - Accuracy enhancement and simulation speeding; Simulation Experiments Design.
 - Real and IM&S Information Storage and Transmission Formats; Data Analysis and Comparison Methods; Data Mining.
 - Dynamic Adaptation and Personalization of the Human-Computer-Model Interaction.

3. IM&S Efficacy Estimation and Life Cycle Management
 - Meta-modeling; Econometrical Meta-Models; M&S Efficacy Indicators.
 - M&S Detailness and Life Cycle Optimization in respect of Designed Product Life Cycle Management. Emergency Cases.
 - Methods for Verification and Validation in IM&S Life Cycle.

4. IM&S Application Development Methods and Best Practices in Industry, Education and Science.
 - IM&S Impact in Industry
 - IM&S in Science and Technology (S&T). Specifics in Information and Communication S&T.
 - IM&S in and for Education
 - IM&S in Knowledge Market & Business Informatics.

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Krassimir Markov

Program Committee

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Vladimir Shelestov (Ukraine)
Yrii Zaichenko (Ukraine)

Language

The official languages of the Conference are English and Russian .



MDA 2012

International Conference

Mathematics of Distances and Applications

July 02 - 05, 2012, Varna (Bulgaria)

Aims and Scope

The conference objective is to present and discuss current achievement in the fields of the Mathematics of Distances and Applications.

The concept of distance is basic to human experience. In everyday life it usually means some degree of closeness of two physical objects or ideas, i.e., length, time interval, gap, rank difference, coolness or remoteness, while the term metric is often used as a standard for a measurement. But here we consider, except for the last two topics, the mathematical meaning of those terms, which is an abstraction of measurement.

Distance metrics and distances have now become an essential tool in many areas of Mathematics and its applications including Geometry, Probability, Statistics, Coding/Graph Theory, Clustering, Data Analysis, Pattern Recognition, Networks, Engineering, Computer Graphics/Vision, Astronomy, Cosmology, Molecular Biology, and many other areas of science.

Devising the most suitable distance metrics and similarities, to quantify the proximity between objects, has become a standard task for many researchers. Especially intense ongoing search for such distances occurs, for example, in Computational Biology, Image Analysis, Speech Recognition, and Information Retrieval. Often the same distance metric appears independently in several different areas; for example, the edit distance between words, the evolutionary distance in Biology, the Levenstein distance in Coding Theory, and the Hamming+Gap or shuffle-Hamming distance.

The conference is dedicated to the broad issue of deeper understanding of Mathematics of Distances and Distance Design for applications.

Topics of interest

Topics of interest include but are not limited to:

<i>Mathematics of Distances</i>	General Definitions; Topological Spaces; Generalizations of Metric Spaces; Metric Transforms; Metrics on Normed Structures
<i>Geometry and Distances</i>	Distances in Geometry; Riemannian and Hermitian Metrics; Distances on Surfaces and Knots; Distances on Convex Bodies, Cones, and Simplicial Complexes
<i>Distances in Classical Mathematics</i>	Distances in Algebra; Functional Analysis; Probability Theory; Distances on Strings and Permutations, on Numbers, Polynomials, and Matrices
<i>Distances in Applied Mathematics</i>	Distances in Graph Theory; Coding Theory; Distances and Similarities in Data Analysis; Distances in Mathematical Engineering
<i>Computer-related Distances</i>	Distances on Real and Digital Planes; Voronoi Diagram Distances; Image and Audio Distances; Distances in Internet and Similar Networks
<i>Distances in Natural Sciences</i>	Distances in Biology; Physics and Chemistry; Geography, Geophysics, and Astronomy; Cosmology and Theory of Relativity
<i>Real-world Distances</i>	Length Measures and Scales; Distances in Applied Social Sciences;

ITA 2012

Joint International Scientific Events on Informatics

June 18 - July 05, 2012, Varna (Bulgaria); September-October 2012, Ukraine, Poland, Spain

Program committee

Michel Deza (France)
Michel Petitjean (France)
Krassimir Markov (Bulgaria)

Tetsuo Asano (Japan)
Michael Baake (Germany)
Stefan Dodunekov (Bulgaria)
Ehtibar Dzhafarov (USA)
Uwe Grimm (UK)

Vladimir Gurvich (USA)
Sandi Klavzar (Slovenia)
Jacobus Koolen (South Korea)
Svetlozar Rachev (USA)
Egon Schulte (USA)
Sergey Shpectorov (UK)
Kokichi Sugihara (Japan)
Koen Vanhoof (Belgium)
Cedric Villani (France) (Fields Medal 2010)

Sessions and organizers

"Geometric complexity in aperiodic order" (Michael Baake and Uwe Grimm)
"Coding theory" (Stefan Dodunekov)
"Applications of distances in behavioral and life sciences" (Ehtibar Dzhafarov)
"Discrete geometry, combinatorics, and distances" (Egon Schulte)

Language

The official language of the conference is English

Contacts:

Scope, topics of interests and program of the conference:

Michel Deza , e-mail: michel.deza@ens.fr

Papers' review and acceptance:

Michel Petitjean, e-mail: petitjean.chiral@gmail.com

Papers' submission, publishing, and participation in the conference:

Krassimir Markov, e-mail: markov@foibg.com



KDS 2012

XVIII-th International Conference

Knowledge - Dialogue - Solution

September 10 - 13, 2012, (Ukraine)

Aims and Scope

The Conference continues the series of annual international KDS events organized by V.M. Glushkov Institute of Cybernetics of National Academy of Sciences of Ukraine and Association of Developers and Users of Intelligent Systems (ADUIS).

Topics of interest

- Applied Information Systems
- Data Mining and Knowledge Discovery
- Decision Making
- Intelligent information technology
- Interdisciplinary Scientific Research
- Logical Inference
- NL Text Processing
- Neural and Growing Networks
- Mathematical methods research of complex systems
- Modern (e-) Learning and intelligent systems
- Philosophy and Methodology of Informatics
- Problems of Computer Intellectualization

Steering Committee

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	Vitaliy Lozovskiy (Ukraine)	

Organizing Committee

Anna Andrushenko	Oleksandra Skripnik	Volodymyr Opanasenko
Mykola Petrenko	Vitalii Velychko	

Language

The official languages of the Conference are Russian and English.
Work language at the conference time is Russian.



MeL 2012

VII-th International Conference

Modern (e-) Learning

September, 14-15, 2012, Kiev (Ukraine)

Aims and Scope

The conference is devoted to discussion of current research and applications regarding the basic directions of modern (e-) learning: Philosophy and Methodology of the Modern (e-) Learning and Modern (e-) Learning Technologies.

Topics of interest

Philosophy and Methodology of the Modern (e-) Learning

- Accreditation and Validation of Modern (e-) Learning Materials
- Learning Communities and Virtual Spaces for Modern (e-) Learning Communities
- Copyright Regulations and Intellectual Property
- Evolution in Teacher Roles through Technology
- Experience and Problems of Implementation of Distance Learning Systems
- Informatics of the Modern Learning
- Instructional Design Theories of Modern (e-) Learning
- Institutional Issues on Technology-based Learning
- Interaction of Classical and Modern (e-) Learning
- Knowledge Market
- Modern (e-) Learning Paradigms
- Organizational Problems of Distance Learning
- Pedagogical and Organisational Frameworks of Modern (e-) Learning
- Pedagogical Approaches - Classical and Modern Didactic Principles of Modern (e-) Learning
- Policies on Technology-based Learning
- Psychological and Ergonomic Aspects of Modern (e-) Learning
- Social Aspects of Modern (e-) Learning
- Standardisation of the Modern (e-) Learning Materials
- Standards and Quality Requirements for the Certification and Assessment of the Learners' Progress
- Teaching Aspects of Modern (e-) Learning

Modern e-Learning Technologies

- Information Retrieval and Visualization in e-Learning
- Multimedia Educational Systems
- Media for Learning in Multicultural Settings
- Mobile e-Learning Applications
- P2P e-Learning Applications
- Social Aspects in Collaborative e-Learning Systems
- Standardization in e-Learning Technologies (incl. Learning Objects, Learning Designs, Modelling Languages)
- Technology-based Blended, Distance and Open Learning
- Technology-Facilitated Learning in Complex Domains
- Technologies for advanced Teacher Training
- Technology and Human Resource Issues
- Using AI/Semantic Web Technologies for Personalized and Contextual Learning
- Web-based Educational Information Systems

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June 18 - July 05, 2012, Varna (Bulgaria); September-October 2012, Ukraine, Poland, Spain

Steering Committee

Alexey Voloshin (Ukraine)
Koen Vanhoof (Belgium)
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Liudmila Lyadova (Russia)
Oleg Zakusilo (Ukraine)

Program Committee

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Vitaliy Snituk (Ukraine)
Vladimir Bugrov (Ukraine)
Vladimir Donchenko (Ukraine)
Yury Zaychenko (Ukraine)

Language

The official languages of the Conference are English and Russian.
Work language at the conference time is Russian.

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INFOS 2012

V-th International Conference
Intelligent Information and Engineering Systems

September 18 - 22, 2012, Rzeszow, Polanczyk (Poland)

<http://infos.prz.edu.pl>

Aims and Scope

The conference is devoted to discussion of current research and applications regarding the knowledge-based intelligent information and engineering systems.

Topics of interest

Topics of interest include but are not limited to:

Theoretical foundations:

- Cognitive Modeling,
- Genetic Algorithms and Evolutionary Computing,
- Expert Systems,
- Fuzzy Techniques and Systems,
- Hybrid Intelligent Systems,
- Intelligent Agents and Multi-Agent Systems,
- Data Mining,
- Knowledge Acquisition.
- Knowledge-Based Systems,
- Knowledge Discovery,
- Knowledge Representation and Management,
- Natural Language Processing,
- Neural Networks,
- Neuro-fuzzy systems
- Machine Learning,
- Spatial and Temporal Reasoning,
- Soft Computing Techniques

Intelligent Applications:

- Artificial Intelligence in Modeling and Simulation,
- Bioinformatics using Intelligent and Machine Learning Techniques, Image Processing,
- Human-Robot interaction,
- Business Intelligence Systems,
- Industrial Control and Monitoring,
- Information Agents on the Internet,
- Intelligent Natural Language Systems,
- Intelligent Robots,
- Intelligent User Interfaces,
- Intelligent Web Mining and Applications,
- Mechanical Applications,
- Machine and Computer Vision,
- Medical and Diagnostic Systems,
- Multi-Media Intelligent Information Systems,
- Speech Processing and Synthesis
- Virtual Production, Virtual Design

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Steering Committee

Galina Setlak, Rzeszow University of Technology, Poland
Krassimir Markov, Institute on Information Theories and Applications, Bulgaria

Program Committee

Alexey Voloshyn (Ukraine)	Koen Vanhoof (Belgium)
Adil Timofeev (Russia)	Levon Aslanyan (Armenia)
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Juan Penuella Castellanos (Spain)	

Organizing Committee

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Jacek Jakiela, Rzeszow University of Technology, Poland
Sławomir Gorka, Rzeszow University of Technology, Poland
Arkadiusz Rzucidlo, Rzeszow University of Technology, Poland

Language

The official language of the Conference is English.

For contacts

Galina Setlak, e-mail: gsetlak@prz.edu.pl

ITA 2012

Joint International Scientific Events on Informatics

June 18 - July 05, 2012, Varna (Bulgaria); September-October 2012, Ukraine, Poland, Spain



NIT 2012

Third International Conference

Natural Information Technologies

October 02-October 05, 2012, Madrid (Spain)

Aims and Scope

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 2010 is to offer a platform to critically assess present findings in the field, and to outline future developments in nature-inspired computing.

Original papers describing current research in the areas given below are invited, but other relevant areas also welcome. Papers in application areas of the same fields will also be considered.

Topics of interest

Topics of interest include, but are not limited to:

NATURAL COMPUTING

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

APPLICATIONS OF NIT

- 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

ITA 2012

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Steering Committee

Krassimir Markov, Institute on Information Theories and Applications, Bulgaria
Juan Castellanos, Universidad Politécnica de Madrid, Spain
Levon Aslanyan, Institute for Informatics and Automation Problems, Armenia

Program Committee

Abraham Gutierrez, Universidad Politécnica de Madrid, Spain
Carmen Vidaurre, Berlin Institute of Technology, Germany
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Rudolf Freund, Technische Universität Wien, Austria
Tasos Bezerianos, University of Patras, Greece
Victor Mitrana, University of Bucharest, Romania
Vincenzo Manca, Università di Verona, Italy
Vladimir Ryazanov, Dorodnicyn Computing Centre of RAS, Russia
Yevgeniy Bodyanskiy, Kharkiv University, Ukraine

Organizing Committee

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Paula Cordero, Universidad Politécnica de Madrid, Spain
Sandra Gómez, Universidad Politécnica de Madrid, Spain
e-mail: nit@eui.upm.es

Language

The official language of the Conference is English.

Conference Location

The conference will held in Escuela Universitaria de Informática, Universidad Politécnica de Madrid, Spain.

For contacts

- Krassimir Markov, e-mail: info@foibg.com
- Juan Castellanos, e-mail: jcastellanos@fi.upm.es
- Sandra Gómez, e-mail: nit@eui.upm.es



ISSI 2012

VI-th International Summer School on Informatics

June 19 – July 01, 2012, Varna (Bulgaria)

Aims and Scope

The Summer School is devoted to discussion of current research, applications and education regarding the basic directions of business informatics.

Topics

Theoretical Foundations of Informatics: Conceptions, Languages, Modelling Technologies, Metrics and Measurements, Information Visualization

Tools and Applications: Tools for Information Modeling, Applied Systems for Information Service, Information Access Methods and Collaboration Tools, Information Security and Reliability, New customer engagement models enabled by Informatics Tools

Informatics of/in Education (IE): IE Conceptions, including relation to other/traditional fields of study, Computer Aided IE, Methodology of IE

Steering Committee

Juan Castellanos (Spain)
Levon Aslanyan (Armenia)
Koen Vanhoof (Belgium)
Krassimir Markov (Bulgaria)

Alexander Kuzemin (Ukraine)
Alexey Voloshin (Ukraine)
Evgeny Eremin (Russia)
Avram Eskenazi (Bulgaria)

Lyudmila Lyadova (Russia)
Luis Fernando de Mingo (Spain)
Stoyan Poryazov (Bulgaria)
Nely Maneva (Bulgaria)

Language

The official languages of the Summer School are English and Russian.

Working languages at the Summer School time are Russian (19-24.06.2012) and English (25.06-01.07.2012).

ITA 2012

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Important information for participants in ITA 2012, Varna, Bulgaria

Please read carefully!

1. Contacts

Mobile numbers of the members of the committee:

+359 878 89 07 07, +359 878 89 07 08, +359 878 89 07 25

Panorama hotel: (+359 52) 36 28 98 www.panoramahotel.bg

2. Travel to the conference

1.1. From Varna

The PANORAMA HOTEL is located less than 10 km by the way from Varna to the Golden Sands resort. Please, see the map http://www.panoramahotel.bg/get_eng.html.

The busses from Varna to Golden Sands (Zlatni pyasatsi): 9, 109, 209, 309, 409.

The name of the bus stop is "PANORAMA".

1.2. From Sofia

Besides the direct flight to Varna and/or the transfer flight from Sofia, there are two possible variants to get from Sofia to Varna:

- by train from the Central Railway Station: www.bdz.bg

- by bus from the Central Bus Station (right beside the Central Railway Station:

www.centralnaavtogara.bg .)

1.3. In Sofia

The transportation from the Sofia Airport to the Central Railway Station and the Central Bus Station can be as follows: By bus – 84 or 284 from the Airport to "Hotel Pliska" stop, and then 213 or 214 to the Central Station.

Note: Luggage bigger than the average will require an extra ticket as well.

- shuttle-bus - from the airport to the station. The price is 1.50 BGN (possible additional taxes for the luggage).

- taxicab: **we do not recommend** to use this transport, or in case you do always check the prices on the stickers on the windows, because the foreigners especially are often offered incredibly high prices.

2. Medicines

We want to remind if you use some special medicines not to forget them.

3. Currency

The fixed official exchange rate: 1 EUR = 1.95583 BGN (leva).

In the change offices the exchange rate may vary from 1.9 to 1.95.

When you change money, please be careful when choosing the change office. At the airport usually the rates are not preferable.

Some change offices use on their front tables fixings which aren't used for the standard procedures – it might be for write the fixing on the front table, which is not the real rate for usual exchange (it may be the rate for checks or for exchanged amount more than 10,000 lv.). Please, always read the all the notices (usually written with smaller letters) and ask the clerk for the exact total you'll receive from the exchange.

We recommend exchanging not more than 50 EUR or USD at a time.

Caution!

Be careful with your money, documents and other important personal belongings.

Make sure you keep them safe with yourself, not putting them in your luggage, as you can easily become a victim of pickpockets or thieves otherwise.

Please be alert in the city public transport as well as in the bus/train when approached by strangers and never leave your baggage unattended.

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