

PREFACE

The **International Journal on Information Theories and Applications** (IJ ITA) has been established in 1993 as independent scientific printed and electronic media.

IJ ITA major topics of interest include, but are not limited to:

INFORMATION THEORIES

<i>Artificial Intelligence</i>	<i>Education Informatics</i>
<i>Computer Intellectualization</i>	<i>General Information Theory</i>
<i>Intelligent Networks and Agents</i>	<i>Hyper Technologies</i>
<i>Intelligent Technologies</i>	<i>Information Models</i>
<i>Knowledge Discovery and Engineering</i>	<i>Intellectualization of Data Processing</i>
<i>Knowledge Acquisition and Formation</i>	<i>Knowledge-based Society</i>
<i>Distributed Artificial Intelligence</i>	<i>Logical Inference</i>
<i>Models of Plausible Reasoning</i>	<i>Natural language Processing</i>
<i>AI Planning and Scheduling</i>	<i>Neuroinformatics</i>
<i>Bioinformatics</i>	<i>Philosophy and Methodology of Informatics</i>
<i>Business Informatics</i>	<i>Quality of the Programs</i>
<i>Cognitive Science</i>	<i>Software Engineering</i>
<i>Decision Making</i>	<i>Theory of Computation</i>

APPLICATIONS

<i>Business Information Systems</i>	<i>Multimedia Systems</i>
<i>Communication Systems</i>	<i>Programming Technologies</i>
<i>Computer Art and Computer Music</i>	<i>Program Systems with Artificial Intelligence</i>
<i>Hyper Technologies</i>	<i>Pyramidal Information Systems</i>
<i>Intelligent Information Systems</i>	<i>Very Large Information Spaces</i>

During the years, IJ ITA became as well-known international journal. Till now, including this volume, **715** papers have been published. IJ ITA authors are widespread in **47** countries all over the world: *Armenia, Azerbaijan, Belarus, Brazil, Belgium, Bulgaria, Canada, China, Czech Republic, Denmark, Egypt, Estonia, Finland, France, Germany, Greece, Hungary, India, Iran, Ireland, Israel, Italy, Japan, Jordan, Kyrgyz Republic, Latvia, Lithuania, Malaysia, Malta, Mexico, Moldova, Netherlands, Poland, Portugal, Romania, Russia, Scotland, Senegal, Serbia and Montenegro, Sweden, Spain, Sultanate of Oman, Turkey, UK, Ukraine, and USA.*

Volume 16/2009 of the IJ ITA contains **29** invited papers.

The great success of IJ ITA belongs to the whole of the ITHEA® International Scientific Society. We express our thanks to all authors, editors and collaborators who had developed and supported the International Journal on Information Theories and Applications.

More information about the IJ ITA rules for preparing and submitting the papers as well as how to take out a subscription to the Journal may be obtained from www.ithea.org.

XVth anniversary of the International Prize "ITHEA"!

The **International Prize "ITHEA"** for outstanding achievements in the area of information theories and applications has been established in 1995.

For fifteen years, 41 leading scientists of the ITHEA International Scientific Society have been awarded by the "ITHEA" Prize.

Congratulations to Prof. Anatoliy Danilovich Krissilov who has been awarded by the "ITHEA" Prize for 2009 year.

Awarded Scientists till 2009:

1995	Sandansky	K. Bankov, P. Barnev, <u>G. Gargov</u> , V. Gladun, R. Kirkova, S. Lazarov, <u>S. Pironkov</u> , <u>V. Tomov</u>
1996	Sofia	T. Hinova, K. Ivanova, I. Mitov, <u>D. Shishkov</u> , N. Vashchenko
1997	Yalta	Z. Rabinovich, V. Sgurev, A. Timofeev, A. Voloshin
1998	Sofia	V. Jotsov
1999	Sofia	L. Zainutdinova
2000	Varna	I. Arefiev, A. Palagin
2001	St.Peterburg	N. Ivanova, <u>V. Koval</u>
2002	Primorsko	A. Milani, M. Mintchev
2003	Varna	T. Gavrilova, A. Eskenazi, V. Lozovskiy, P. Stanchev
2004	Varna	B. Kokinov, T. Vamos
2005	Varna	M. Dobрева, L.F. de Mingo, N.Zagoruiko, A.Zakreuskii
2006	Varna	J. Castellanos, G. Totkov
2007	Kiev	V. Donchenko
2008	Varna	Vladimir Lovitskii, Orly Yadid-Pecht
2009	Varna	A. Krissilov

Krassimir Markov

IJ ITA Founder and Editor in chief