

JOŽEF STEFAN INSTITUTE

Jožef Stefan (1835-1893) was one of the most prominent physicists of the 19th century. Born to Slovene parents, he obtained his Ph.D. at Vienna University, where he was later Director of the Physics Institute, Vice-President of the Vienna Academy of Sciences and a member of several scientific institutions in Europe. Stefan explored many areas in hydrodynamics, optics, acoustics, electricity, magnetism and the kinetic theory of gases. Among other things, he originated the law that the total radiation from a black body is proportional to the 4th power of its absolute temperature, known as the Stefan–Boltzmann law.

The Jožef Stefan Institute (JSI) is the leading independent scientific research institution in Slovenia, covering a broad spectrum of fundamental and applied research in the fields of physics, chemistry and biochemistry, electronics and information science, nuclear science technology, energy research and environmental science.

The Jožef Stefan Institute (JSI) is a research organisation for pure and applied research in the natural sciences and technology. Both are closely interconnected in research departments composed of different task teams. Emphasis in basic research is given to the development and education of young scientists, while applied research and development serve for the transfer of advanced knowledge, contributing to the development of the national economy and society in general.

At present the Institute, with a total of about 900 staff, has 700 researchers, about 250 of whom are postgraduates, around 500 of whom have doctorates (Ph.D.), and around 200 of whom have permanent professorships or temporary teaching assignments at the Universities.

In view of its activities and status, the JSI plays the role of a national institute, complementing the role of the universities and bridging the gap between basic science and applications.

Research at the JSI includes the following major fields: physics; chemistry; electronics, informatics and computer sciences; biochemistry; ecology; reactor technology; applied mathematics. Most of the activities are more or less closely connected to information sciences, in particular computer sciences, artificial intelligence, language and speech technologies, computer-aided design, computer architectures, biocybernetics and robotics, computer automation and control, professional electronics, digital communications and networks, and applied mathematics.

The Institute is located in Ljubljana, the capital of the independent state of Slovenia (or S^{lo}venia). The capital today is considered a crossroad between East, West and Mediter-

anean Europe, offering excellent productive capabilities and solid business opportunities, with strong international connections. Ljubljana is connected to important centers such as Prague, Budapest, Vienna, Zagreb, Milan, Rome, Monaco, Nice, Bern and Munich, all within a radius of 600 km.

From the Jožef Stefan Institute, the Technology park “Ljubljana” has been proposed as part of the national strategy for technological development to foster synergies between research and industry, to promote joint ventures between university bodies, research institutes and innovative industry, to act as an incubator for high-tech initiatives and to accelerate the development cycle of innovative products.

Part of the Institute was reorganized into several high-tech units supported by and connected within the Technology park at the Jožef Stefan Institute, established as the beginning of a regional Technology park “Ljubljana”. The project was developed at a particularly historical moment, characterized by the process of state reorganisation, privatisation and private initiative. The national Technology Park is a shareholding company hosting an independent venture-capital institution.

The promoters and operational entities of the project are the Republic of Slovenia, Ministry of Higher Education, Science and Technology and the Jožef Stefan Institute. The framework of the operation also includes the University of Ljubljana, the National Institute of Chemistry, the Institute for Electronics and Vacuum Technology and the Institute for Materials and Construction Research among others. In addition, the project is supported by the Ministry of the Economy, the National Chamber of Economy and the City of Ljubljana.

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Since 1977, Informatica has been a major Slovenian scientific journal of computing and informatics, including telecommunications, automation and other related areas. In its 16th year (more than twentyfive years ago) it became truly international, although it still remains connected to Central Europe. The basic aim of Informatica is to impose intellectual values (science, engineering) in a distributed organisation.

Informatica is a journal primarily covering intelligent systems in the European computer science, informatics and cognitive community; scientific and educational as well as technical, commercial and industrial. Its basic aim is to enhance communications between different European structures on the basis of equal rights and international refereeing. It publishes scientific papers accepted by at least two referees outside the author's country. In addition, it contains information about conferences, opinions, critical examinations of existing publications and news. Finally, major practical achievements and innovations in the computer and information industry are presented through commercial publications as well as through independent evaluations.

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An International Journal of Computing and Informatics

Editors' Introduction to the Special Issue on "MATCOS-16 Conference"	G. Galambos, A. Brodnik	1
Implementation and Evaluation of Algorithms with ALGator	T. Dobravec	3
Packing Tree Degree Sequences	K. Bérczi, Z. Király, C. Liu, I. Miklos	11
Construction of Orthogonal CC-sets	A. Brodnik, V. Jovičić, M. Palangetić, D. Siladi	19
On Embedding Degree Sequences	B. Csaba, B.M. Vásárhelyi	23
A Self-Bounding Branch & Bound procedure for Truck Routing and Scheduling	C.G. Csehi, Á. Tóth, M. Farkas	33
Improving Flow Lines by Unbalancing	Z. Mihály, Z. Lelkes	39
Incremental 2-D Nearest-Point Search with Evenly Populated Strips	D. Podgorelec, D. Špelič	45
<hr/> <i>End of Special Issue / Start of normal papers</i> <hr/>		
Towards a UML Profile for the Simulation Domain	M. Mourad	53
A New Variant of Teaching Learning Based Optimization Algorithm for Global Optimization Problems	Y. Kumar, N. Dahiya, S. Malik	65
An Empirical Study for Detecting Fake Facebook Profiles Using Supervised Mining Techniques	A.M. Altamimi, M.B. Albayati	77
An Energy Efficient Architecture of IoT Based on Service Oriented Architecture (SOA)	S. Maurya, K. Mukherjee	87
The Student-Self Oriented Learning Model as an Effective Paradigm for Education in Knowledge Society	V.A. Fomichov, O.S. Fomichova	95
Noise-tolerant Modular Neural Network System for Classifying ECG Signal	A. Ochoa, L.J. Mena, V.G. Felix, A. Gonzalez, W. Mata, G.E. Maestre	109
Facial Expression Recognition Based on Local Features and Monogenic Binary Coding	Z. Chen	117
Application of Support Vector Machine Algorithm Based Gesture Recognition Technology in Human-Computer Interaction	W. Cao	123
Collaborative Strategy for Teaching and Learning Object-Oriented Programming course: A Case Study at Mostafa Stambouli Mascara University, Algeria	C. Boudia, A. Bengueddach, H. Haffaf	129
Microworlds with Different Pedagogical Approaches in Introductory Programming Learning: Effects in Programming Knowledge and Logical Reasoning	J.M. Costa	145

