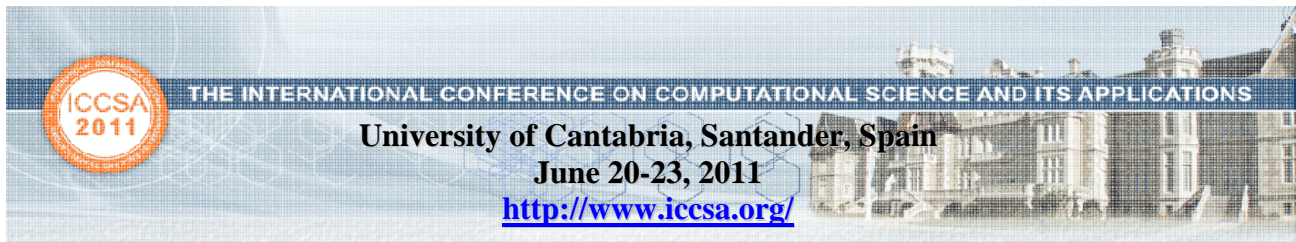


CALL FOR PAPERS



ICCSA 2011 is the next event in the series of highly successful International Conferences on Computational Science and Its Applications, previously held in Fukuoka, Japan (2010), Suwon, South Korea (2009), Perugia, Italy (2008), Kuala Lumpur, Malaysia (2007), Glasgow, United Kingdom (2006), Singapore (2005), Assisi, Italy (2004), Montreal, Canada (2003), and, as ICCS, in Amsterdam, The Netherlands (2002) and San Francisco, USA (2001).

Computational science is a main pillar of most of the present research, industrial and commercial activities and plays a unique role in exploiting ICT innovative technologies. The ICCSA Conference offers a real opportunity to bring together scientists of different disciplines, discuss new issues, tackle complex problems and find advanced solutions breeding new trends in computational science.

The proceedings of the conference will be published by Springer-Verlag and CPS of the IEEE Computer Society. The authors of a selected number of top quality papers will be requested to extend their paper in order to be published as special issues in appropriate international journals.

IMPORTANT DATES

January 31, 2011 (Extended):

March 7, 2011:

April 4, 2011:

April 4, 2011:

Deadline of Abstract and Full Paper Submission

Authors Notification

Deadline of Authors and Early-bird Registration

Submission Deadline of Camera Ready Papers

Conference Themes (but not limited to):

1. Track: **Computational Methods, Algorithms and Scientific Applications**

Topics:

- Computational Biology
- Computational Combustion
- Computational Chemistry
- Computational Fluid Dynamics
- Computational Physics
- Computational Geometry
- Computational Mathematics
- Computational Mechanics
- Computational Electro-magnetics
- Numerical Methods and Algorithms

2. Track: **High Performance Computing and Networks**

Topics:

- Parallel and Distributed Computing
- Cluster Computing
- Supercomputing
- Cloud Computing
- Autonomic Computing
- P2P Computing
- Mobile Computing
- Grid and Semantic Grid Computing
- Workflow Design and Practice
- Computer and Network Architecture

3. Track: **Geometric Modelling, Graphics and Visualization**

Topics:

- Scientific Visualization
- Computer Graphics
- Geometric Modelling
- Pattern Recognition
- Image Processing
- CAD/CAM
- Web3D, Virtual and Augmented Reality

4. Track: **Advanced and Emerging Applications**

Topics:

- Biochemistry
- Bioinformatics
- Astrophysics
- Biometric Modelling
- Environmental, Climate and Weather Modelling
- Geology and Geophysics
- Nuclear Physics
- Financial and Economical Modelling
- Computational Journalism

-- Geographical Information Systems

5. 5. Track: **Information Systems and Technologies**

Topics:

- Information Retrieval
- Scientific Databases
- Security Engineering
- Risk Analysis
- Reliability Engineering
- Software Engineering
- Data Mining
- Artificial Intelligence
- Learning Technologies
- Web Based Computing
- Web 2.0

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The submitted paper must be between 10 to 16 pages long and formatted according to the LNCS rules.

SPECIAL SESSION/WORKSHOP PAPERS:

(See back page for list of Special Sessions/Workshops or browse, <http://www.iccsa.org/sessions>)
The submitted paper must be between 10 to 16 pages long for LNCS publication, and 6 to 8 pages for CPS publication (IEEE CS), and should be formatted according to the LNCS or IEEE Computer Society rules, respectively.

POSTER SESSION PAPERS:

The submitted paper must be between 3 to 4 pages long formatted according to CPS (IEEE CS) rules. The Poster Papers will be presented as posters during the conference, and published by CPS.

Submission of a paper implies that should the paper be accepted, at least one of the authors should register and make oral presentation in the conference. For formatting information and templates, browse <http://www.iccsa.org/author-instructions>.

All submitted papers will be reviewed by two to three reviewers.

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List of Special Sessions/Workshops in conjunction with ICCSA-2011 (in alphabetical order)

Please refer to the ICCSA-2011 website for more details on topics covered by each workshop.

Special Sessions/Workshops	Acronym	Organizers
Approaches or Methods of Security Engineering	AMSE 2011	Tai-hoon Kim (Hannam University, Korea)
Approximation Optimization and Applications	AOA 2011	Ana Maria A.C. and Maria Irene Falcao (University of Minho, Portugal)
Advances in Web Based Learning	AWBL 2011	Mustafa Murat Inceoglu (Ege University, Turkey)
Computational aspects and Methods in Renewable Energies	CAMRE 2011	Maurizio Carlini, Sonia Castellucci and Andrea Tucci (University of Tuscia, Italy)
Computer Aided Modeling Simulation and Analysis	CAMSA 2011	Jie Shen (University of Michigan, USA)
Computer Algebra Systems and their Applications	CASA 2011	Andres Iglesias (University of Cantabria Spain) and Akemi Galvez (University of Cantabria, Spain)
Computational Design for Technology Enhanced Learning: Methods Languages Applications and Tools	CD4TEL 2011	Michael Derntl (University of Vienna, Austria), Manuel Caeiro-Rodríguez (University of Vigo, Spain), and Davinia Hernandez-Leo (Universitat Pompeu Fabra, Barcelona, Spain)
Computational Geometry and Applications	CGA 2011	Marina Gavrilova (University of Calgary)
Computer Graphics and Virtual Reality	CGVR 2011	Oswaldo Gervasi (University of Perugia Italy), Andres Iglesias (University of Cantabria, Spain)
Chemistry and Materials Sciences and Technologies	CMST 2011	Antonio Laganà (Università di Perugia, Italy)
Consulting Methodology and Decision Making for Security Systems	CMDMSS 2011	Sangkyun Kim (Kangwon National University Korea)
Cities, Technologies and Planning	CTP 2011	Giuseppe Borruso (University of Trieste, Italy), Beniamino Murgante (University of Basilicata, Italy)
Cloud for High Performance Computing	C4HPC 2011	Andrés Gomez (CESGA, Santiago de Compostela, Spain) and Oswaldo Gervasi (University of Perugia, Italy)
Future Information System Technologies and Applications	FISTA 2011	Bernady O. Apduhan (Kyushu Sangyo University, Japan), Jianhua Ma (Hosei University, Japan), Qun Jin (Waseda University, Japan)
Geographical Analysis, Urban Modelling, Spatial statistics	Geo-An-Mod 2011	Stefania Bertazzon (University of Calgary, Canada), Giuseppe Borruso (University of Trieste, Italy), Beniamino Murgante (University of Basilicata, Italy)
International Workshop on Biomathematics Bioinformatics and Biostatistics	IBBB 2011	Unal Ufuktepe (Izmir University of Economics, Turkey) and Andres Iglesias (University of Cantabria, Spain)
International Workshop on Collective Evolutionary Systems	IWCES 2011	Clement Leung (Hong Kong Baptist University, Hong Kong), Alfredo Milani (University of Perugia, Italy)
Mobile Communications	MC 2011	Hyunseung Choo (Sungkyunkwan University, Korea)
Mobile Sensor and its Applications	MSA 2011	Moonseong Kim (Korean Intellectual Property Office)
Mobile Systems and Applications	MoSA 2011	Younseung Ryu (Myongji University, Korea)
Logical, Scientific and Computational Aspects of Pulse Phenomena in Transitions	PULSES 2011	Carlo Cattani (University of Salerno, Italy), Cristian Toma (Corner Soft Technologies, Romania) and Ming Li (East China Normal University, China)
Remote sensing Data Analysis, Modelling, Interpretation and Applications: from a Global View to a Local Analysis	RS 2011	R. Lasaponara (IRMMA, CNR, Italy) and N. Masini (IBAM, CNR, Italy)
Symbolic Computing for Dynamic Geometry	SCDG 2011	Francisco Botana (Vigo University, Spain)
Software Engineering Processes and Applications	SEPA 2011	Sanjay Misra (Federal University of Technology Minna, Nigeria)
Software Quality	SQ 2011	Sanjay Misra (Federal University of Technology Minna, Nigeria)
Tools and Techniques in Software Development Processes	TSDP 2011	Sanjay Misra (Federal University of Technology Minna, Nigeria)
Virtual Reality in Medicine and Surgery	VRMS 2011	G. Aloisio (University of Salento, Italy) and L. T. De Paolis (University of Salento, Italy)
Wireless and Ad Hoc Networking	WADNet 2011	Jongchan Lee and Sangjoon Park (Kunsan National University, Korea)
WEB 2.0 & Social Networks	Web2.0 2011	Vidyasagar Potdar (Curtin University of Technology, Australia)
Workshop on Internet Communications Security	WICS 2011	José María Sierra (University Carlos III of Madrid, Spain)
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