

### Congress venue

Facultade de CC. da Comunicación  
Universidade de Santiago de Compostela  
Avda. Castelao s/n  
E-15782 Santiago de Compostela (Spain)

### Technical Secretariat

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<http://www.gruposoc.es/>

### Registration fees

The registration fee includes attending to the sessions, coffee breaks, lunches, social events, official dinner and the Proceedings of the Work-Conference.

Type	Before 30 April	After April 30
Standard	€ 500	€ 600
Session Organizer	€ 400	€ 500
Accompanying person (*)	€ 300	€ 300

(\*) Accompanying person registration fee only includes lunches, social events and official dinner. Registration fees of at least one author for each accepted paper should be paid in full before submission to press (April 30, 2009).

### IWINAC 2009 important deadlines

Full papers submission due: **February 15, 2009**  
Acceptance notification and start of registration: April 1, 2009  
End of reduction fee for early registration: April 30, 2009  
Congress date: June 22-26, 2009

IWINAC 2009 official web:  
<http://www.iwinac.org>

# IWINAC 2009

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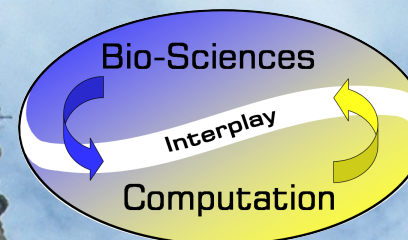
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# IWINAC 2009



3rd INTERNATIONAL WORK-CONFERENCE  
on the INTERPLAY between  
NATURAL and ARTIFICIAL COMPUTATION

## Call for Papers

Facultade de CC. da Comunicación  
Universidade de Santiago de Compostela  
Santiago de Compostela, (Spain)  
June 22-26, 2009

Organized by:  
Universidad Nacional de Educación a Distancia (UNED)  
and Universidad Politécnica de Cartagena  
in cooperation with  
Universidade de Santiago de Compostela

IWINAC 2009 official web:  
<http://www.iwinac.org>



## Final Call for Papers

The third "International Work-conference on the Interplay between Natural and Artificial Computation" (IWINAC-2009) will take place in Santiago de Compostela, (Spain) June, 22-26, 2009.



### In Memoriam to Prof. Mira.

Unfortunately, our friend Prof. Mira passed away on August 13th, 2008. As a pioneer in the field of Cybernetics, He was enthusiastically promoting and organizing this interdisciplinary meetings.

We would like to carry on with IWINAC2009 in honour to his scientific work. A plenary conference and a special session dedicated to his work will take place during IWINAC 2009.

### Location

Santiago de Compostela is situated at the Northwest of Spain. This historical town is the capital of the Autonomous Community of Galicia and is declared a World Heritage City by UNESCO thanks to its multicultural nature and as the final destination of a thousand-year-old pilgrim route: the Way of St. James, which, since the 9th century, has transformed this finis terrae into a meeting place of Western faith and thinking.

### Scope

This interdisciplinary meeting, with focus on the interplay between Nature and Computation, expands the scope of neural computation at the physical level to cope with symbols and knowledge level models of cognitive and social processes. The global purpose is to offer a forum for discussion and exchange of ideas between scientists and engineers from fields such as Electronic Engineering, Artificial Intelligence, Knowledge Engineering, Physics, Mathematics, Computation, Artificial Vision, Situated Robotics, Neurophysiology, Cognitive Science, Linguistics and Philosophy, trying to contribute to the answer of two basic questions:

*What can Physics, Mathematics, Engineering, Computation, Artificial Intelligence (AI) and Knowledge Engineering (KE) contribute to the understanding of Nervous System, Cognitive Processes and Social Behavior?*

*How can Engineering, Mathematics, Computation, AI and KE find inspiration in the behavior and internal functioning of physical, biological and social systems to conceive, develop and build-up new concepts, materials, mechanisms and algorithms of potential value in real world applications?*

### Topics

#### Computational Neuroscience & Biomedical Engineering

- Neural Modeling
- Perceptual Motor & Associative Mechanisms
- Multisensorial Coding
- Neurosimulators
- Cognitive Processes Modeling
- Perception, Memory, Decision Making and Learning
- Brain Interfacing
- Brain Imaging
- Consciousness

#### Bioinspired Computation & Engineering

- Evolvable Hardware
- Bionic Prostheses & Sensory Supplencies
- Evolutionary Computation
- Self-organizing & Collective Emerging Computation
- Symbolic-Connectionist Hybrid Approaches
- Bioinspired AI & KE
- Artificial Vision
- Robotics
- Health Technologies
- Other Bioinspired Applications

Please, find extended descriptions of the topics in the webpage:

<http://www.iwinac.org>

### Paper Submission

The Program Committee request original papers on the mentioned topics. All accepted papers will be published in the proceedings by Springer-Verlag in Lecture Notes on Computer Science series. Please check terms and conditions for publication at <http://www.iwinac.org>

### Special Issues of selected Journals (expected)

Best papers will be selected by the scientific committee to include an extended version in special issues of relevant Journals of the field:

- Natural Computing
- Neurocomputing
- Robotics & Autonomous Systems
- Image & Vision Computing
- Computational Intelligence

### Call for pre-organized sessions

The Program Committee is requesting proposals for pre-organized sessions in one of the topics or related to the global scope presented above. Also, new sessions in the interdisciplinary spirit of the interplay between natural and artificial computation are welcome. Prospective organizers should contact organization staff at [info@iwinac.org](mailto:info@iwinac.org) as soon as possible. Information about current pre-organized sessions and further details for prospective organizers can be found at web: <http://www.iwinac.org>. The organizers of effective pre-organized sessions will benefit of a discount on registration fees.

### Invited Speakers

- Dario Maravall & Javier de Lope (Universidad Politécnica de Madrid, Spain)
- Eduardo Fernández (Universidad Miguel Hernández, Spain)
- José del R. Millán (IDIAP, Switzerland)
- Tom Heskes (ICIS, Netherlands)

### Honour Committee

- Roberto Moreno Díaz, ULPGC(Sp)
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- Roque Marín Morales, UM (Sp)
- Ramon Ruiz Merino, UPCT (Sp)
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- Diego Cabello Ferrer, USC (Sp)
- Francisco J. Ríos Gómez, UMA (Sp)
- José Manuel Ferrández, UPCT (Sp)

### Organizing Committee

- José Ramón Álvarez Sánchez, UNED(Sp)
- Félix de la Paz López, UNED (Sp)
- Javier Toledo Moreo, UPCT (Sp)
- Organization e-mail: [info@iwinac.org](mailto:info@iwinac.org)

### Local Organizing Committee

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