

Congress venue

Centro de Congresos "Ciutat d'Elx"
Carrer del Filet de Fora, 1
03203 Elche, Alicante
Spain

Technical Secretariat



Viajes Hispania
Avda. Maisonave, 11-7º, 03002 Alicante, Spain
tlf (+34) 965 22 83 93
<http://www.viajeshispania.com/>
e-mail: bbaeza@viajeshispania.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.

"Attendant A" registration fee only includes lunches, social events and official dinner.

"Attendant B" registration fee only includes social events and official dinner.

"2nd paper and more" registration includes only conference proceedings.

Registration fees of at least one author for each accepted paper should be paid in full before submission to press (April 21, 2015).

Type	Before 30 April	After April 30
Standard	€ 500	€ 600
Session Organizer	€ 400	€ 500
Attendant A	€ 175	€ 175
Attendant B	€ 100	€ 100
2nd paper and more	€ 300	€ 350

IWINAC 2015 important deadlines

Full papers submission due: **February 28, 2015** (extended)

Acceptance notification and start of registration: April 1, 2015

End of reduction fee for early registration: April 30, 2015

Congress date: June 1-5, 2015

IWINAC 2015 official web:
<http://www.iwinac.org>

IWINAC 2015

Supported by:



UNED



UPCT

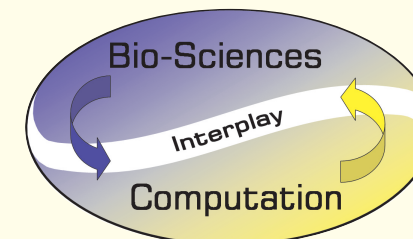


UMH



IWINAC 2015 official web:
<http://www.iwinac.org>

IWINAC 2015



**6th INTERNATIONAL WORK-CONFERENCE
on the INTERPLAY between
NATURAL and ARTIFICIAL COMPUTATION**

Call for Papers



**Centro de Congresos "Ciutat d'Elx",
Elche, (Spain)
June 1-5, 2015**

Organized by:

Universidad Nacional de Educación a Distancia
and Universidad Politécnica de Cartagena
in cooperation with:

UNED- Elx Associated Center
and Universidad Miguel Hernández

Sponsored by:

Red Nacional en Computación Artificial y Natural
Apliquem Microones S.L.

IWINAC 2015 official web:
<http://www.iwinac.org>

Final Call for Papers

The sixth "International Work-conference on the Interplay between Natural and Artificial Computation" (IWINAC-2015) will take place in Elche, Spain.

Location

The historic quarter of Elche, capital of the region of Bajo Vinalopó (El Baix Vinalopò) in Alicante, preserves part of its Muslim past and Baroque splendour. Its palm tree grove, a World Heritage Site, adds to the appeal of the region, along with two holiday celebrations that have been declared of International Tourist Interest: "Domingo de Ramos" (Palm Sunday) and the Mystery of Elche. The Festa d'Elx (Festival of Elche) has been declared Masterpiece of the Oral and Intangible Heritage of Humanity by UNESCO. Elche is a must for many reasons, such as its many nature reserves, its coastal towns and its prestigious gastronomy, to name a few.

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
- Probabilistic methods
- 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:

- International Journal of Neural Systems (JCR IF **6,056**)
- Integrated Computer-aided Engineering (JCR IF **4,667**)
- Frontiers in Computational Neuroscience (JCR IF **2,5**)
- Neurocomputing (JCR IF **2,005**)
- Pervasive and Mobile Computing (JCR IF **1,667**)
- Expert Systems (JCR IF **0,750**)

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 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

Prof. Hojjat Adeli, Ohio State University (USA)
Prof. Marc de Kamps, University of Leeds (UK)
Prof. Richard Duro, University of A Coruña (Spain)

General Chairman

José Manuel Ferrández Vicente UPCT (Spain)

Organizing Committee

José Ramón Álvarez Sánchez, UNED (Spain)
Félix de la Paz López, UNED (Spain)
Javier Toledo Moreo, UPCT (Spain)

Organization e-mail: info@iwinac.org

Local Organizing Committee (UMH) Spain

Eduardo Fernández Jover Alejandro García Moll
Nicolás García Aracil Ariadna Díaz Tahoces
José María Sabater Navarro Lawrence Humphreys
Carlos Pérez Vidal Cristina Soto-Sánchez
Arantxa Alfaro Sáez

IWINAC2015 Workshops

- 1st Workshop on Gerontechnology and e-Therapy. Chairperson: Antonio Fernández-Caballero (Spain)
- Robot autonomy revised: grounding emotions and cognitive states in robot behavior. Chairperson: Emilia Barakova (The Netherlands).

Doctoral Consortium

In conjunction with IWINAC 2015, a Doctoral Consortium will take place. It will provide an opportunity for graduate students to explore their research interests in an interdisciplinary workshop, under the guidance of a panel of distinguished experts in the field. To apply for participation at the Doctoral Consortium, please visit our website:

<http://www.iwinac.org/iwinac2015/doctoralconsortium/>
Chairperson: Darío Maravall Gómez-Allende (UPM) Spain

Scientific Committee

Abraham, Ajith (Norway)
Adamatzky, Andy (U.K.)
Affenzeller, Michael (Austria)
Aleksander, Igor (U.K.)
Alonso Betanzos, Amparo (Spain)
Amari, Shun-ichi (Japan)
Andonie, Razvan (U.S.A.)
Anguita, Davide (Italy)
Arias, Manuel (Spain)
Bachiller Mayoral, Margarita (Spain)
Bahamonde, Antonio (Spain)
Ballard, Dana (U.S.A.)
Barakova, Emilia I. (Netherlands)
Barro Ameneiro, Senén (Spain)
Barreiro, Alvaro (Spain)
Brémond, François (France)
Cannata, Giorgio (Italy)
Carmona Suárez, Enrique J. (Spain)
Carreña Amigo, Purificación (Spain)
Cerdá Boluda, Joaquín (Spain)
Cervera Mateu, Enric (Spain)
Chella, Antonio (Italy)
Chinellato, Eris (Spain)
Corchado, Emilio S. (Spain)
Cotta, Carlos (Spain)
Csuha-Varij, Erzsébet (Hungary)
Cuadra Troncoso, José Manuel (Spain)
Delgado García, Ana E. (Spain)
de Lope, Javier (Spain)
del Pobil, Angel P. (Spain)
De Schutter, Erik (Belgium)
Doménech Asensi, Ginés (Spain)
Dorransoro, Jose (Spain)
Dreyfus, Gérard (France)
Duro, Richard (Spain)
Eckhorn, Reinhard (Germany)
Fattori, Patrizia (Italy)
Febles Rodríguez, Juan Pedro (Cuba)
Félix Lamas, Paulo (Spain)
Fernández, Eduardo (Spain)
Fernández-Caballero, Antonio (Spain)
Fernández Delgado, Manuel (Spain)
Fernández-Graçiani, Miguel A. (Spain)
Fukushima, Kunihiko (Japan)
Gamallo Solórzano, Cristina (Spain)
Gámez, Jose A. (Spain)
Garcera Hernández, Vicente (Spain)
García Herrero, Jesús (Spain)
García-Laencina, Pedro J. (Spain)
García Madruga, Juan Antonio (Spain)
Garrigos Guerrero, Francisco J. (Spain)
Gedeon, Tamás (Tom) D. (Australia)
Gerritsen, Charlotte (Netherlands)
Gheorghe, Marian (U.K.)
Gómez Vilda, Pedro (Spain)
G. Puntonet, Carlos (Spain)
Górriz, Juan M. (Spain)
Graña Romay, Manuel (Spain)
Guil-Reyes, Francisco (Spain)
Hallam, John (Denmark)
Herreras, Oscar (Spain)
Herrero, Juan Carlos (Spain)
Hervás Martínez, César (Spain)
Heskes, Tom (Netherlands)
Iglesias Rodríguez, Roberto (Spain)
Jimenez Barrionuevo, F. (Spain)
Juarez, Jose M. (Spain)
Kok, Joost N. (Netherlands)
Koroutchev, Kostadin (Spain)
Korutcheva, Elka (Spain)
Kuniyoshi, Yasuo (Japan)
Lánsky, Petr (Czech Rep.)
Lappe, Marcus (Germany)
Longobardi, Maria (Italy)
López Bonal, Maria Teresa (Spain)
López de Mántaras, Ramon (Spain)
Lourens, Tino (Netherlands)
Lungarella, Max (Japan)
Luque Gallego, Manuel (Spain)
Maciá Pérez, Francisco (Spain)
Maistro, George (U.K.)
Manca, Vincenzo (Italy)
Mange, Daniel (Switzerland)
Manzotti, Riccardo (Italy)
Maravall, Darío (Spain)
Marín, Roque (Spain)
Martínez Álvarez, Jose Javier (Spain)
Martínez Tomás, Rafael (Spain)
Medina Moreno, Jesus (Spain)
Millan, Jose del R. (Switzerland)
Mitrana, Victor (Spain)
Molina López, José Manuel (Spain)
Montserrat Puchades, Javier (Spain)
Morales Sánchez, Juan (Spain)
Morán, Federico (Spain)
Moreno Díaz, Ana Belén (Spain)
Moreno Díaz, Arminda (Spain)
Moreno Díaz, Roberto (Spain)
Moreno Díaz, Roberto Jr. (Spain)
Navarrete Sánchez, Isabel (Spain)
Nedjah, Nadia (Brazil)
Nishida, Taishin Y. (Japan)
Normann, Richard A. (U.S.A.)
Ojeda-Aciego, Manuel (Spain)
Paletta, Lucas (Austria)
Palma Méndez, José T. (Spain)
Pantrigo, Juan José (Spain)
Pascual-Leone, Alvaro (U.S.A.)
Patricio Guisado, Miguel Angel (Spain)
Paun, Gheorghe (Spain)
Pazos Sierra, Juan (Spain)
Pérez Jiménez, Mario J. (Spain)
Pérez-Lorenzo, José Manuel (Spain)
Pichler, Franz (Austria)
Puerta, Jose M. (Spain)
Quesada Arencibia, Alexis (Spain)
Qunitia Vidal, Pablo (Spain)
Ramírez Pérez de Inestrosa, J. (Spain)
Rincón Zamorano, Mariano (Spain)
Rodellar, Victoria (Spain)
Rodríguez González, Miguel A. (Spain)
Rodríguez Presedo, Jesus M. (Spain)
Rodríguez Rodríguez, Jose C. (Spain)
Rodríguez Vela, Camino (Spain)
Ruiz Merino, Ramón (Spain)
Sánchez-Andrés, Juan Vicente (Spain)
Sánchez Calle, Angel (Spain)
Sánchez Vila, Eduardo (Spain)
Sancho-Gómez, José Luis (Spain)
Santos Reyes, José (Spain)
Sanz, Ricardo (Spain)
Sato, Shunsuke (Japan)
Schierwagen, Andreas (Germany)
Sciavicco, Guido (Spain)
Serban, Radu (Netherlands)
Shevelev, Igor A. (Russia)
Sigüenza, Juan A. (Spain)
Solé i Casals, Jordi (Spain)
Soriano Payá, Antonio (Spain)
Taboada Iglesias, María Jesús (Spain)
Termini, Settimo (Italy)
Toledo Moreo, Javier (Spain)
Treur, Jan (Netherlands)
Trillas Ruiz, Enric (Spain)
Varela Arias, Ramiro (Spain)
Velasco, Marley (Brazil)
Wang, Lipo (Singapore)
Wermter, Stefan (U.K.)
Yang, Xin-She (U.K.)
Yin, Hujun (U.K.)
Zhou, Changjiu (Singapore)