

## PAAMS 2014 – Workshop CFP

### MASGES - MULTI-AGENT BASED APPLICATIONS FOR SMART GRIDS AND SUSTAINABLE ENERGY SYSTEMS

4th-6th June, 2014

<http://www.paams.net/masges14/>

MASGES is one of the several Workshops confirmed for PAAMS 2014 – the 12th International Conference on Practical Applications of Agents and Multiagent Systems, which is going to take place at the University of Salamanca, between June 4th and 6th 2014. The aim of the Workshops is to cover specific fields within the scope of PAAMS'14. More information can be found at [www.paams.net](http://www.paams.net).

After the explicit commitment of many countries to support the installation and management of often small renewable energy production sources, the old energy grids need to be upgraded to a much more intelligent and flexible grid, not only for electricity but also for gas and heat. Such so called smart grids most likely need to rely on decentralized control and a highly efficient, fast, flexible and reliable management. This requires smart grids to be capable of autonomously and intelligently configuring themselves to make the most efficient use of available resources, to be robust to all kinds of failures and energy production deviations, and to be extendable and adaptable in the face of rapidly changing technologies and requirements. The distributed nature of these systems, and the autonomous behaviour expected of them, points towards multi-agent systems as a possible foundation for the realisation of the management software for such grids. While a lot has to happen on the energy production and provision level the house of the future as well as the transportation means of the future need to be smoothly integrated in such a smart grid concept as well, which means that houses need to be smart as well. Regarding to the economic aspects, the electrical power industry was traditionally heavily regulated with a lack of market-price mechanisms. Owing to new regulations, it has evolved into a distributed and competitive industry in which market forces drive electricity prices. Electricity markets (EMs) are not only a new reality but also an evolving one, meaning that researchers lack insight into numerous open problems that are being raised. Chief among these are the technical difficulties to understand the internal dynamics of EMs and the additional complexities to coordinate economic and financial issues. Thus, the focus of this workshop is on applications of multi-agent systems technology in **smart grids, smart homes and electricity markets**.

#### General structure

MASGES will be a full-day workshop and will include several presentation sessions for the accepted paper as well as invited speeches by one or two invited speakers. It is intended to end the workshop with a panel/discussion round in which the relevant results of the workshop will be discussed.

#### ORGANIZERS

Giancarlo Fortino - Università della Calabria (Italy)

Ryszard Kowalczyk - Swinburne University of Technology (Poland)

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**Zita Vale - IPP - Polytechnic Institute of Porto (Portugal)**

**Hugo Morais - DTU – Denmark Technical University (Denmark)**

#### Important Dates

Submission date: 20th January, 2014

Notification date: 24th February, 2014

Camera-ready deadline: 10th March, 2014

Conference dates: 4th-6th June, 2014

#### Submission

PAAMS workshops welcomes the submission of original, relevant and previously unpublished sound research results related to any of the topics of the conference.

All papers must be formatted according to the Springer CCIS Template, with a maximum length of 10-12 pages in length, including figures and references. All proposed papers must be submitted in electronic form (PDF format) using the [Paper Submission Page](#).