

## CALL FOR PAPERS

### SPECIAL SESSION ON Observability, Opacity and Liveness in Discrete Event Systems

Invited session identification code: 9nf6d

14th Workshop on Discrete Event Systems (WODES 18): <http://wodes2018.unisa.it/>

May 30 - June 1, 2018

Sorrento Coast, Italy

#### Session Co-Chairs:

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#### Session description:

Discrete Event System (DES) models (for instance Petri nets, automata, Markov chains) are used to describe very different aspects of the real world: computer systems, communication systems, manufacturing systems, traffic systems. Corporations and researchers are attracted by the key problem of using effectively and efficiently the latest developments of Information and Communication Technologies and Internet of Things in different new fields such as transportation systems, logistics networks, healthcare systems, smart building and smart cities. This new application leads to the description of new realities that exhibit a high degree of concurrency and are characterized by resource sharing and conflicts. The challenge is opening new frontiers in the application of tools and models typical of the discrete event systems in order to improve the knowledge and the management of new complex and man made systems.

In this context, DES properties play an important role to analyse, control and evaluate complex system behaviour. The special session focuses on observability, opacity and liveness property issues. The related topics include the following DES models:

- Petri Nets
- Timed Petri Nets
- Hybrid Petri Nets
- Continuous Petri Nets
- Automata
- Timed Automata
- Markov chain

and the following properties:

- Observability
- Critical Observability
- Opacity
- Deadlock avoidance
- Liveness

**Submission of draft papers:** 15 November 2017 -

**Submission website:** <http://ifac.papercept.net/conferences/>

**Conference website:** <http://wodes2018.unisa.it/>