

# The Third International Workshop on Networks of Cooperating Objects

## CONEt 2012

April 16<sup>th</sup>, 2012 – Beijing, China  
Co-located with the CPS Week 2012 (<http://www.cpsweek.org/>)

### General Co-Chairs:

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Mário Alves, CISTER, ISEP, Polytechnic Institute of Porto

### Technical Program Co-Chairs:

Lucia Pallottino, University of Pisa  
Nuno Pereira, CISTER, ISEP, Polytechnic Institute of Porto

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During the last decade, the continuous improvement and miniaturization of integrated circuits has led to new types of computing systems. An emerging trend is the collaboration of miniature devices to achieve a common goal. Representative examples include wireless sensor networks, pervasive computing and embedded systems.

Along with this trend, the notion of Cooperating Objects (COs) collectively refers to embedded computing devices equipped with communication as well as sensing or actuation capabilities, able to cooperate and organize themselves autonomously into networks to achieve a common task. As such, COs envision a single, coherent system formed by a wide range of devices. The complexity germane to the interaction inside and across networks of COs presents a rich set of research questions, and entails a wide range of scientific disciplines, such as networking, software engineering, and control theory.

CONEt 2012 will provide a discussion forum for researchers, aimed at fostering synergy and convergence of complementary areas towards the vision of networks of COs. Work-in-progress systems, provocative ideas, and position papers paving the road towards such synergy and convergence are particularly welcome.

### Topics of Interest

Authors are invited to submit papers for presentation at the workshop. The topics of interest include theoretical and empirical work in, but not limited to:

- Resource management of COs
- Quality-of-Service in networks of COs
- Hardware platforms for COs
- Mobile and distributed sensing
- Hybrid cooperation of static and mobile nodes
- Communication and control of mobile COs
- Distributed control and estimation over networks
- Decentralized algorithms for control over wireless sensor networks
- Decentralized, distributed, and cooperative optimization
- Applications of control of COs
- Real-time aspects of COs
- System software for COs
- Communication support for COs
- Real-world deployments of COs
- Applications of COs to body area networks
- COs in Complex Systems
- Security and Privacy in COs
- Enterprise Integration of COs
- Application of wireless sensor networks on Pervasive computing
- Closed-loop applications of pervasive computing

### Important Dates

Paper submission: **Monday, January 30<sup>th</sup>, 2012**

**Friday, February 17th, 2012**

Author Notification: **Friday, February 24<sup>th</sup>, 2012**

**Friday, February 24<sup>th</sup>, 2012**

Camera Ready: Friday, March 11<sup>th</sup>, 2010

### Website

<http://conet2012.cister-isep.info/>



### Workshop Format

The workshop will feature invited talks, invited papers, panel discussions and submitted contributions. The main objective of the workshop is to provide an interactive forum to share ideas and motivate discussions. We explicitly encourage the submission of short position papers (4 pages Springer). The CONET Workshop does not take copyright for any papers.

### Paper Submission

Papers submitted must contain original material that has neither been previously published nor is currently under review by another conference or journal. Full research papers (max. 16 pages) as well as work-in-progress and position papers (max. 4 pages) are welcome. Submissions should be formatted according the Springer LNCS style. Submissions can be made at:

<https://www.easychair.org/conferences/?conf=conet2012>

Papers will be subject of a blind review with 3 reviews per submission. Conference proceedings of all accepted papers will be distributed electronically. These proceedings are not considered to be archived publications and thus papers presented at the CONET Workshop do not prevent later submission to a conference or journal.