

CPS SUMMER SCHOOL

Designing Cyber-Physical Systems – From concepts to implementation

SEPTEMBER 23-27 2019 – ALGHERO, SARDINIA, ITALY



Porto Conte Ricerche - Alghero (Italy)
September 23-27, 2019

Cyber-physical systems (CPS) are complex and autonomous ensembles of different components that interact to offer smart and adaptive functionalities. These systems are increasingly used in a variety of applications with a growing market, potentially bringing about significant social benefits. However, there is no such thing as a free

lunch, and there are several new challenges and trade-offs to face when designing CPS, especially since they should be able to adapt to the changing environments, or heal themselves. Uncertain operation environments and interactions with humans as users and/or as operators complicate the scenarios of these ever increasingly pervasive systems. The CPS summer school is targeted at students, research scientists, and R&D experts from academia and industry, who want to learn about CPS engineering and applications. The program is composed of both lectures and practical sessions, covering all the design phases of CPS (i.e., from concept to the definition of the final system and the discussion of the key challenges).

ORGANIZATION

- **School Director:** Francesca Palumbo, Università degli Studi di Sassari
- Christian Pilato, Politecnico di Milano
- Luca Pulina, Università degli Studi di Sassari
- Carlo Sau, Università degli Studi di Cagliari

CONFIRMED SPEAKERS

include, among others, the following distinguished lecturers (please check complete list online):

- **Alberto Sangiovanni-Vincentelli** (University of California, Berkeley)
- **Luigia Carlucci Aiello** (Sapienza University of Rome)
- **Nikil Dutt** (UC Irvine)
- **Nuria de Lama** (ATOS)
- **Luca Carloni** (Columbia University)
- **Jeronimo Castrillon** (TU Dresden)

Topics include, but are not limited to, the following:

- Market trends for CPS
- Hardware/software and multi-view modelling
- Adaptivity
- Low power design of heterogeneous systems
- Tools for dataflow design, high-level synthesis, hardware/software co-design, and coarse/fine reconfiguration

Proceedings: The school aims at collecting brief abstracts of the participants (either PhD plans and work-in-progress ideas). These abstracts will be published as indexed proceedings but the authors retain the copyright for future publications.

Application and Registration

The school is open to up to 40 participants.

Application deadline: June 10, 2019.

Notification deadline: June 15, 2019.

CONTACT & INFO

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