



# CPS Summer School

## Designing Cyber-Physical Systems - From concepts to implementation

21-25 September 2020 - Pula, Italy

<http://www.cpsschool.eu/>

### Scope and Mission

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 fourth edition of 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).

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

### Organization

#### School Director

Francesca Palumbo, University of Sassari

#### Workshop Chair

Luca Pulina, University of Sassari

#### Tutorial Chair

Armando Tacchella, University of Genova

#### Sponsor Chair

Christian Pilato, Politecnico di Milano

#### Registration Chair

Tiziana Fanni, University of Sassari

#### Financial Chair

Monica Marini, University of Sassari

#### Publicity Chair

Laura Pandolfo, University of Sassari

### Important Dates

The school is open to up to 40 participants.

**Application:** June 10, 2020

**Notification:** June 15, 2020

### Confirmed Speakers

- Erika Ábrahám, RWTH Aachen University, DE
- Twan Basten, Eindhoven Univ. of Technology, NL
- Luca Benini, Univ. di Bologna, IT & ETH Zurich, CH
- Battista Biggio, Pluribus One, IT
- Michaela Blott, Xilinx Dublin, IRL
- Elisa Costante, Eindhoven Univ. of Technology, NL
- Gianfranco Deriu, Università degli Studi di Cagliari, IT
- Marc Geilen, Eindhoven Univ. of Technology, NL
- Diana Göhringer, Technische Universität Dresden, DE
- Paolo Meloni, Università degli Studi di Cagliari, IT
- Alberto Sangiovanni-Vincentelli, University of California, Berkeley
- Carlo Sau, Università degli Studi di Cagliari, IT
- Giacomo Valente, Università dell'Aquila, IT

### Contact & Info

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