The number of intelligent embedded devices continues to multiply rapidly therefore leading to the emergence of autonomous systems in order to provide highly efficient, safe and secure functions. Autonomous driving constitutes today one of the best examples of this trend.

However, with the increase of the level of automation, systems design becomes very challenging in order to accommodate the high complexity, connectivity and heterogeneity of the system while complying with rigorous constraints in terms of safety, real-time capabilities and security.

The workshop will explore recent industrial and academic methods and methodologies in autonomous systems design. This includes several areas:

1) embedded and cyber-physical systems platforms that implement and

execute the autonomous system functions including their architectures,

hardware, software and communication,

2) the design for autonomous systems

including processes, modeling, optimization, verification, validation, and test

3) all aspects of dependable systems design for autonomous systems including,

but not limited to, functional safety concepts, fail-operational systems design,

functional safety for applications with machine learning, safe and secure changes

and updates, autonomous systems security.

- **Submission deadline**: 25 November 2018

- **Authors Notification**: 20 January 2019  (preliminary workshop program available)

- **Camera-ready version**: 03 January 2019

- **Workshop Day**: 29 March 2019

## Venue

### Firenze Fiera

### Fortezza da Basso

(Main conference venue Monday - Friday)  
Padiglione Spadolini, lower floor  
Viale Filippo Strozzi no. 1.  
50123 Florence, IT

Steering Committee

- Marko Bertogna, University of Modena, Italy,

- Naehyuck Chang, Korea Advanced Institute of Science and Technology, Korea

- Klaus Dietmayer, Ulm University, Germany

- Rolf Ernst, TU Braunschweig, Germany

- Karl Henrik Johannson, KTH Royal Institute of Technology, Sweden,

- Matthias Traub, BMW, Germany

- Dirk Ziegenbein, Robert Bosch GmbH, Germany

The workshop organizers

* Rolf Ernst, TU Braunschweig
* Selma Saidi, Hamburg University of Technology
* Dirk Ziegenbein, Robert Bosch GmbH

Program Committee

-Stefan Kowalewski , RWTH Aachen University, Germany

-Marco Di Natale, Scuola Superiore Sant'Anna, Italy

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-Samarjit Chakraborty, Technical University of Munich, Germany

-Lin Xue, Northeastern University, USA

-Dongwha Shin , Yeungnam University, Korea ? New affiliation

- Assad Al Alam, Scania CV AB, Sweden

-Markus Maurer, TU Braunschweig, Germany

- Bart Besselink, University of Groningen, Netherlands

-Peter Bergmiller, Audi Ingolstadt , Germany(to be confirmed)

-Thomas Form, Volkswagen , Germany (to be confirmed)