ACD 2019
15th European Workshop on Advanced Control and Diagnosis

Bologna, Italy, 21-22 November 2019

CALL FOR PAPERS

The 15th European Workshop on Advanced Control and Diagnosis (ACD 2019) will be held Thursday to Friday, November 21-22, 2019 at Palazzo Grassi, Bologna, Italy, with the technical co-sponsorship of IFAC and the support of Alma Mater Studiorum Università di Bologna. The European Workshop on Advanced Control and Diagnosis is a scientific event periodically organized by research groups active in the areas of advanced control systems and fault diagnosis. The first edition took place in Duisburg, Germany, in November 2003. Since then, it has been organized annually and hosted at various Universities in France, Germany, UK, Poland, Italy, Hungary, Denmark, Czech Republic and Romania. The aim is gathering academics and professionals from diverse fields of control systems and automation and offering them a forum to discuss current research developments and open problems, illustrate practical applications and articulate industry needs and priorities. In accordance with the ACD tradition, all major areas of advanced control and diagnosis will be covered in this edition, which, as a novelty with respect to the previous ones, will also include topics related to cyber-physical production systems, industrial internet of things, systems and control for sustainability, and structural methods for complex systems.
For further details, please, visit the conference web-site **https://eventi.unibo.it/acd2019**

Paper Submission and Publication

Authors are invited to submit papers and invited session proposals in all areas of advanced control and fault diagnosis. Papers will be reviewed by at least three independent reviewers and acceptance/rejection will be decided by the IPC. At least one author is required to register at the conference and present his/her paper for this to be included in the proceedings. By uploading their manuscript, the authors certify that the submission represents original work that neither has appeared or has been accepted to appear elsewhere for publication, nor is under review for another publication in its current form. The conference proceedings will be published online in a volume of the **Springer series** "**Lecture Notes in Control and Information Sciences – Proceedings"** **https://eventi.unibo.it/acd2019/paper-submission**

Important Dates

Papers Submission Deadline: **Extended to 30 June 2019**   Final Paper Submission: **31 July 2019**
Invited Session Proposals Deadline: **30 June 2019**   Early Registration Deadline: **31 July 2019**
Notification of Acceptance: **20 July 2019**   Workshop Dates: **21-22 November 2019**

Paper Awards

Best Student Paper Award: https://eventi.unibo.it/acd2019/best-student-paper-award
Best Industry Paper Award: https://eventi.unibo.it/acd2019/best-industry-paper-award

Plenary Speakers and Technical Program

Confirmed Plenary Speakers:
•Sarah Spurgeon, University College London
•Alessandro Giua, Università di Cagliari
Industry Day Panel Discussion:

M. Bubani (VEM Sistemi), D. Capellini (Capellini Electrospindles), A. Di Matteo (STMicroelectronics), A. Garibbo (Leonardo Corporate), E. Pascale (Hitachi Rail STS)

Workshop Registration

Full Registration: 250,00 Euro before 31 July 2019 (280,00 Euro after 31 July 2019).
Student Registration: 150,00 Euro before 31 July 2019 (170,00 Euro after 31 July 2019).

Industry Day: 150,00 Euro before 31 July 2019 (170,00 Euro after 31 July 2019).

The full-rate fee includes on-line proceedings, coffee-breaks, buffet lunches, social dinner, 1 accepted paper upload. The student-rate fee includes on-line proceedings, coffee-breaks, buffet lunches, 1 accepted paper upload. The "Industry Day" fee includes coffee-break and buffet lunch on Friday. Additional paper uploads are possible at the rate of 80,00 Euro each. Banquet tickets can be purchased at the rate of 80,00 Euro each. **https://eventi.unibo.it/acd2019/registration**

IFAC Co-Sponsoring Technical Committees

TC 6.4 "Fault Detection, Supervision and Safety of Technical Processes – SAFEPROCESS"
TC 2.2 "Linear Control Systems"

Topics

Fault-tolerant control, control reconfiguration
Model-based diagnosis of linear and nonlinear systems
Fault diagnosis in hybrid systems
Data-driven diagnosis methods
Process supervision
Diagnosis and control of discrete-event systems
Maintenance and repair strategies
Statistical methods for FDI, reliability and safety
Condition monitoring and maintenance engineering
Prognosis and health management

Interval methods and numerical methods
Neural and fuzzy methods
Artificial Intelligence methods for control and diagnosis
Vision and robotics
Cyber-physical production systems
Industrial Internet of Things
Systems and control for sustainability
Intelligent sensors and actuators
Transportation systems
Renewable energy systems

National Organizing Committee

Chair: Elena Zattoni, Italy **Vice-Chair from Industry:** Danilo Mascolo, Italy
Co-Chairs: Maria Elisabetta Penati, Italy (Local arrangements), Elena Mainardi, Italy (Special tracks)

International Program Committee

IPC Chair: Silvio Simani, Italy
IPC Vice-Chair: Jozef Korbicz, Poland
IPC Vice-Chair from Industry: Peter Fogh Odgaard, Denmark
IPC Members: A. Aitouche, FR; P. Albertos, ES; V. Azhmyakov, CO; A. Bartoszewicz, PL; M. Bartys, PL; A.S. Bazanella, BR; J. Bokor, HU; M. Bonilla Estrada, MX; A. Boulkroune, DZ; A. Casavola, IT; P. Castaldi, IT; V. Cocquempot, FR; S. Ding, DE; M. El Badaoui El Najjar, FR; A. Fekih, USA; A. Ferrara, IT; M. Fikar, SK; A. Giua, IT; J.M. Gomes da Silva Jr., BR; D. Henry, FR; D. Krokavec, SK; B. Kulcsár, SE; M. Malabre, FR; D. Maquin, FR; P. Mercorelli, DE; A. Monteriù, IT; S.I. Niculescu, FR; H.H. Niemann, DK; N. Otsuka, JP; A.M. Perdon, IT; D. Popescu, RO; V. Puig Cayuela, ES; I. Puncochar, CZ; O. Ravn, DK; S. Spurgeon, UK; O. Straka, CZ; Z. Szabó, HU; F. Tadeo, ES; D. Theilliol, FR; C. Verde Rodarte, MX; A. Trofino, BR; M. Witczak, PL; S. Yin, CN; M. Yu, CN; A. Zemouche, FR; Q. Zou, USA
Publication Chair: Giuseppe Conte, Italy
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Contacts

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Web: https://eventi.unibo.it/acd2019

Workshop Venue

The city of Bologna has a population of almost 400.000 inhabitants and it is the historic capital of the Emilia-Romagna region, in Northern Italy. Bologna is located at the crossroads of the most important highways and railways that goes from North to South, from East to West of the Peninsula. Also, Bologna can be easily reached by direct flights from all the main European airports. The town, with its rich history, the oldest university of the western world, the beautiful middle-age downtown, the excellent food, the lively streets, and the gorgeous surroundings is the perfect setting not only for a profitable scientific event but also for a very pleasant stay.
https://eventi.unibo.it/acd2019/travel-information