



# SYROCO 2018

## 12<sup>TH</sup> IFAC SYMPOSIUM ON ROBOT CONTROL

August 27-30, 2018 - Budapest, Hungary



INTERNATIONAL FEDERATION  
OF AUTOMATIC CONTROL

### DATES AND DEADLINES

12 January - Submission of Invited Sessions  
and Open Invited Tracks

9 February - Submission of full papers

8 April - Notification of acceptance

8 June - Deadline for final manuscript & early payment

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TC 7.3. Aerospace

TC 7.5. Intelligent  
Autonomous Vehicles

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### SCOPE AND OBJECTIVE

There are several conferences on the engineering approach of robotics. The primary topics for the SYROCO 2018 will be the control aspects of robotics applications. Robot control technology is widely used for space, surgery, rehabilitation, micro machine, entertainment, underwater, civil engineering, professional and domestic services, security etc. The control will continue to play an increasing role in the areas of robotics including robot-robot and human-robot cooperation in various dynamic scenarios. Contributions on basic research as well as on relevant applications are included. In addition, the Moving devices (mobile robots, vehicles and UAVs) which can operate in nonindustrial (nonstandard) environment need to have totally new functions and behaviours. It is not enough to execute a pre-programmed action line. They must be able to adapt to changing environments, make their own decisions and in addition, they might have to socially fit into the human environment. They have to follow regulations developed originally for human beings. It means that new problems of control are emerging and have to be solved. This Symposium provides an opportunity to present and discuss research and development work in the hot area of intelligent autonomous systems from the point of view of control.

### TOPICS OF INTEREST INCLUDE, BUT ARE NOT LIMITED TO:

Control of intelligent autonomous systems: mobile robots, vehicles and UAVs Semi-, highly- and full-automated driving • Control of Vehicle Groups and Fleets • Control of Moon and Mars rovers • Etho-Robotics (ethologically inspired robot motion and behaviour) • Cognitive robot programming and supervising autonomous agents • Modelling of cognitive processes for robotics applications • Control problems of Haptic interaction • Control problems of Telemanipulation • Control problems of Micro/Nano manipulation • Control problems of Networked robots • Robot control (adaptive, robust, learning) • Force and compliance control • Multi-fingered hand control • Multi cooperative robot control • Sensory based robot control • Compact & efficient power for robots • Industrial robot control applications

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SYROCO2018 will be held back-to-back with the  
18<sup>th</sup> International Conference on Power Electronics and Motion Control

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