

(Apologies for multiple copies due to cross posting)

Call for Papers for the IFAC
Intelligent Autonomous Vehicles Symposium (IAV2016)

<http://iav2016.inf.h-brs.de/>
June 29 - July 1, 2016
Leipzig, Germany

Co-located with 20th anniversary of RoboCup 2016 world championships

:: Important Dates

Paper submission:	November 1, 2015
Acceptance notification:	February 15, 2016
Final paper submission:	March 15, 2016

:: Objectives and Scope

The symposium addresses topics in the field of Intelligent Autonomous Vehicles (IAV). It aims at the presentation of methods and/or innovative techniques to solve typical problems, to exemplify successful test cases or to document operational applications. Modalities extend from land, sea, air and reach as far as space. Involved target systems have been designed as multi vehicle compounds, swarms or networked platoons as well as individual carriers. The systems may perform domestic, service, field, maritime, ocean, air or even outer space related tasks.

The subjects of IAV expand from onboard control over interaction with its environment up till auxiliary support systems.

:: Key topics include but are not limited to

- Navigation, Guidance and Control, e.g.
motion control,
controller design,
modeling,
stability analysis,
trajectory tracking,
path following and pose regulation.
- Sensing and Perception, e.g.
sensors, including smart and networked sensors,
integration of sensors,
localization including SLAM,
map building,
recognition.
- Planning and Mission Control, e.g.
local and global roadmap planning,
task and motion planning,
decision support systems,
driver support systems,
advanced driver assistance systems.

- Architectural Aspects of IAVs, e.g.
for individual vehicles,
for teams and swarms.
- Communication, Cooperation and Networking, e.g.
multiple-vehicle systems,
platoons and teams,
vehicle to vehicle communication,
operator or infrastructure communication,
human-vehicle interaction.
- Applications, Execution and Use, e.g.
transportation systems,
land and ocean exploration,
air and space applications,
remote control,
remote and local monitoring,
tele-operation,
fault detection, diagnosis and removal.

:: Submission Procedure

To submit a paper, please follow the link "CONTRIBUTION" located on the top line of the conference website.

:: Sponsor

IFAC Technical Committee 7.5 on Intelligent Autonomous Vehicles (IAV)

:: Co-Sponsors

IFAC Technical Committee TC 1.3 - Discrete Event and Hybrid Systems
 IFAC Technical Committee TC 4.1 - Components and Technologies for Control
 IFAC Technical Committee TC 4.3 - Robotics
 IFAC Technical Committee TC 7.1 - Automotive Control
 IFAC Technical Committee TC 7.3 - Aerospace

:: Committee Chairs

- International Program Committee (IPC)
 Prof. Giuseppe Oriolo, Sapienza Universita di Roma, Roma, Italy
 Prof. Paul Plöger, Bonn-Rhein-Sieg University, St. Augustin, Germany
 Prof. Raul Rojas (editor), Freie Universität Berlin, Berlin, Germany
 Dr. Thanh Binh To, Volkswagen Aktiengesellschaft, Wolfsburg, Germany
- National Organization Committee (NOC)
 Prof. Karsten Berns, Uni. of Kaiserslautern, Kaiserslautern, Germany
 Prof. Oskar von Stryk, TU Darmstadt, Darmstadt, Germany
 Dipl.-Ing. Martin Hägele, Fraunhofer IPA, Stuttgart, Germany

The complete list of IPC and NOC members is available on the conference website under "COMMITTEES".

For further information on IAV2016 please contact one of the co-chairs
paul DOT ploeger AT h-brs DOT de, orioló AT dis DOT uniroma1 DOT it
or contact marcel DOT zimmerling AT h-brs DOT de

:: Copyright Conditions

"All publication material submitted for presentation at an IFAC-sponsored meeting (Congress, Symposium, Conference, Workshop) must be original and hence cannot be already published, nor can it be under review elsewhere. The authors take responsibility for the material that has been submitted. IFAC-sponsored conferences will abide by the highest standard of ethical behavior in the review process as explained on the Elsevier webpage (<http://www.elsevier.com/journal-authors/author-rights-and-responsibilities>), and the authors will abide by the IFAC publication ethics guidelines (<http://www.ifac-control.org/events/organizers-guide/PublicationEthicsGuidelines.pdf>).

Accepted papers that have been presented at an IFAC meeting will be published in the proceedings of the event using the open-access IFAC-PapersOnLine series hosted on ScienceDirect (<http://www.sciencedirect.com>). To this end, the author(s) must confer the copyright to IFAC when they submit the final version of the paper through the paper submission process. The author(s) retain the right to use a copy of the paper for personal use, internal institutional use at the author(s)' institution, or scholarly posting at an open web site operated by the author(s) or their institution, limited to noncommercial use. Any other use of the paper requires approval by IFAC.", cited from the website below.

For further copyright information, please refer to
<http://www.ifac-control.org/publications/copyright-conditions>.