

Welcome

Dear colleagues,

We are pleased to announce the **International Conference Cyber-Physical Systems and Control (CPS&C'2019)** which will be held from 10 to 12 June 2019 in St. Petersburg, Russia.

Cyber-Physical Systems (CPS) are a new generation of control systems and techniques which help promote prospective interdisciplinary research. A wide range of theories and methodologies are being investigated and developed in this area to tackle complex and challenging problems. Therefore, CPS can be considered as a scientific and engineering discipline that is set to make impact on future industrial and societal-scale systems characterised by deep integration of real-time processing, sensing, and actuation across logical and physical heterogeneous domains.

CPS&C'2019 aims to bring together researchers and practitioners from all over the world and to reveal cross-cutting fundamental scientific and engineering principles that underpin the integration of cyber and physical elements across all application fields. The conference agenda includes keynote and plenary lectures, sessions and discussions.

Attendees of **CPS&C'2019** become a part of our scientific community and will have the opportunity to discover the magnificent city of St. Petersburg in especially beautiful period of White Nights.

We are looking forward to seeing you in June at Peter the Great St. Petersburg Polytechnic University which celebrates its 120th anniversary this year.

CPS&C'2019 Co-chairs

Professor Michael Krommer, <i>Vienna University of Technology</i>	Professor Dmitry G. Arseniev, <i>Peter the Great Saint-Petersburg Polytechnic University</i>	Professor Ludger Overmeyer, <i>Leibniz University Hannover</i>
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Organisers

Leibniz University Hannover, Germany
Peter the Great St. Petersburg Polytechnic University, Russia
Vienna University of Technology, Austria

Conference Scope

We shall be very pleased if you can present your paper.
Please see the list of topics covered in the scientific programme.

Fundamentals

Control Theory
System Analysis
Paradigms, Models and Architectures
Methods and Algorithms
Components and Structures
Knowledge Base and Knowledge Management

Technologies

Engineering
Industrial Internet of Things
Artificial Intelligence and Machine Learning
Cognitive Systems
Real-Time Systems
Safety and Security Systems

Applications

Smart Manufacturing
Mechatronics and Robotics
Human Digital Interfaces
Networking and Telecommunications
Transport and Logistics
Energy and Smart Grid

Conference Background

The conference draws upon the experience of previous research events that have focused on information technologies, system analysis, engineering and control and have been hosted by Peter the Great St. Petersburg Polytechnic University in partnership with leading European and Russian academic institutions. The most significant in series of these events are the International Conference System Analysis in Engineering and Control (since 1998), the Distributed Intelligent Systems and Technologies Workshop (since 2008), the International Scientific Symposium Automated Systems and Technologies (since 2014), the International Conference Network Cooperation in Science, Industry and Education (in 2016), each attended by hundred participants.

Paper Submission and Key dates

25 March 2019 Abstract submission and Registration

Authors should fulfill a **registration form** on the website **cpssc.spbstu.ru**.
As the first step, authors submit only abstracts (up to 200 characters) via the **EasyChair** conference management system (<https://easychair.org>).
Please follow the instructions of the EasyChair conference management system for creating your personal account.
If you already have an account in the EasyChair, please use submission link:
<https://easychair.org/conferences/?conf=cpsc2019>
and select option "enter as an author", then fill in the required fields on the page "New Submission".

21 April 2019 Final Paper Submission

The camera-ready PDF documents with the text of papers are submitted via the EasyChair conference management system (<https://easychair.org>).
All papers should be in the range of 12 000-14 000 characters. The list of references should include at least 20 sources.
Origin, Motivation and Contribution
Please note that all papers must be original and not simultaneously submitted to another journal or conference. All papers are supposed to present novel research results of international interest. The references to related work must be appropriate. Papers need to be related to the topics covered in the scientific programme of the conference.
All abstracts and papers must be submitted and presented in English.
All papers will be peer-reviewed by experts in the field based on originality, significance, quality and clarity.

Authorship

Number of authors in a single paper is four person maximum. One person can be the author of not more than two papers. The corresponding author is the person chosen within the group to be responsible for all contact and correspondence with the periodical.
The corresponding author should ensure that all appropriate co-authors (and no one inappropriate co-authors) are included on the paper, and that all co-authors have seen and approved the final version of the paper and have agreed to its submission for publication.
Accepted full papers will be published in the conference proceedings. Abstracts and selected papers will be published in Scopus Indexed journals.

10 May 2019 Deadline for Authors Registration

Conference Chair

Professor Michael Krommer, Vienna University of Technology, Austria
Ludger Overmeyer, Leibniz University Hannover, Germany
Dmitry G. Arseniev, Peter the Great St. Petersburg Polytechnic University, Russia

Scientific Committee

Alexander K. Belyaev, Institute of the Problems of Mechanical Engineering of the Russian Academy of Sciences, Russia
Alexey A. Bobtsov, St. Petersburg National Research University of Information Technologies, Mechanics and Optics, Russia
Joachim Denil, University of Antwerp, Belgium
Tatiana A. Gavrilova, St. Petersburg State University, Russia
Galina V. Gorelova, Southern Federal University, Russia
Stein E. Johansen, Institute for Basic Research, FL, USA
Arto Kaarna, Lappeenranta University of Technology, Finland
Heikki Kälviäinen, Lappeenranta University of Technology, Finland
Nicos Karcanias, University of London, Great Britain
Branko Katalinic, Vienna University of Technology, Austria
Michael S. Kupriyanov, St. Petersburg Electrotechnical University "LETI", Russia
Nikolay V. Kuznetsov, St. Petersburg State University, Russia
Dmitriy A. Novikov, Institute of Control Sciences of the Russian Academy of Sciences, Russia
Leonid I. Perlovsky, Harvard University, MA, USA
Vladimir A. Polyansky, Institute of the Problems of Mechanical Engineering of the Russian Academy of Sciences, Russia
Andrey L. Ronzhin, St. Petersburg Institute for Informatics and Automation of the Russian Academy of Sciences, Russia
Vyacheslav P. Shkodyrev, Peter the Great St. Petersburg Polytechnic University, Russia
Hans-Rolf Tränkler, Bundeswehr University Munich, Germany
Hans Vangheluwe, University of Antwerp, Belgium
Violetta N. Volkova, Peter the Great St. Polytechnic University, Russia
Valeriy V. Vyatkin, Luleå University of Technology, Sweden

Organising Committee

Vyacheslav P. Shkodyrev Chairman
Aleksandra V. Loginova
Vyacheslav V. Potekhin



Conference fee

Participation fee € 300* / RUB 22500*
Student fee € 50 / RUB 3750

*The participation for scientists from partners' universities is defined by a special fee level.
Conference fee does not include accommodation payment. The costs of travel and accommodation participants cover themselves. All payments from the Russian citizens and organisations are made in rubles.

Accommodation

The Organising Committee can help conference attendees with booking accommodation in St. Petersburg hotels.

Venue

29, Polytechnicheskaya Str., Research Building
(Metro Polytechnicheskaya), 195251, St. Petersburg, Russia

Organising Committee Contacts

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St. Petersburg, Russia
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