

September 30 - October 5, 2018 | Switzerland | SPCS 2018

International IEEE Symposium on Precision Clock Synchronization for Measurement, Control, and Communication

European Organization for Nuclear Research (CERN)



CALL FOR PAPERS

Plugfest: September 30 - October 2 Symposium: October 3 - 5

www.ispcs.org

The objective of the symposium, to be held at the European Organization for Nuclear Research, CERN, in Geneva, Switzerland, September 30 - October 5, is to provide a forum for researchers and practitioners from industry, academia, national laboratories and government involved in the area of Precision Clock Synchronization and Distributed Time-based Applications.

Advancing Technology for Humanity

Symposium Topics

We welcome paper submissions on all areas of precision clock synchronization and distributed timebased applications. Example topics of interest include but are not limited to:

Topics of interest include, but are not limited to:

Distributed applications based on synchronized clocks:

- Software, hardware, and system architecture
- Time-based programming models
- Design environments and tools
- Distributed algorithms using or based on synchronized clocks
- Robustness of distributed time-based systems
- Fault tolerance in distributed time-based systems
- Security in distributed time-based systems

Clock synchronization technology:

- Design, usage and research concerning IEEE 1588
- Systems with heterogeneous synchronization technologies
- Synchronization performance test and evaluation tools
- Analytic, modeling, and simulation studies
- Clock system management
- Timing security and robustness
- Synchronization over gigabit, fiber, and wireless networks

- Application requirements studies
- Case studies and field experience
- Analytic, modelling, and simulation studies
- Time-based cyber-physical systems
- Time synchronization for robotics and control
- Time synchronization for cloud computing infrastructure
- IaaS Data Plane & PaaS Control/Management Plane
- Local and wide-area synchronization
- Servo design for slave clocks
- Device design and application support
- Conformance testing and system integration issues
- Time and frequency distribution
- Work-In-Progress reports
- Emerging and potential markets, e.g., smart grid, highfrequency trading, and other applications of PTP

Submission of Papers

Authors should submit a six-page original manuscript (except for Special Industry Session). Papers must follow the standard IEEE Manuscript Templates for Conference Proceedings. Submission instructions will be posted on the conference website.

http://www.ieee.org/conferences events/conferences/publishing/templates.html

Special Industry Session

Industry Session papers will be presented as slides at the conference only. Only a one to two page abstract submission is required rather than a full paper submission. While not published in the ISPCS Proceedings, presentation slides will be posted on the ISPCS website after the conference, as they are for the full paper presentations.

Work in Progress Papers

Work in Progress (WIP) papers will be reviewed and presented in a poster session.

Paper Acceptance

All papers will be peer-reviewed. Each accepted paper must be presented at the conference by one of the registered authors. The final manuscript must be accompanied by the registration form and proof of payment.

Final Papers

Final papers are limited to six pages or less in IEEE double column format. Full papers are accepted in IEEE compliant PDF format. All full papers will be published in the conference proceedings on a flash drive and on IEEE Xplore.

May 14, 2018