

18th IEEE International Conference on Factory Communication Systems (WFCS)

27-29 April 2022, Pavia, Italy

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DESCRIPTION

The **Factory Communication** research area is becoming increasingly relevant in last years, with communication playing a fundamental role in many automation systems. New generation technologies, such as 5G/6G, WiFi6/WiFi7, TSN, or OPC UA, open the door to a variety of application possibilities, from general automation to IIoT. On the other hand, due to the high variety of available communication solutions, and the fact that different technologies have usually to be combined together in order to satisfy application requirements, industrial communication systems become highly complex and heterogenous. This condition creates several new challenges that need to be tackled to fully exploit the potential of available communication solutions (including subjects related to network management, traffic optimization, virtualization, energy efficiency, and many others).

The 18th edition of WFCS will focus on all forms of communication supporting automation within factories and in other contexts, especially considering recent developments. WFCS is the largest IEEE conference that is especially dedicated to communication for (industrial) automation systems and aims to provide a forum for researchers, developers and practitioners to review and discuss recent trends in the area and share innovative research directions.

The conference, supported by the **IEEE Industrial Electronics Society (IES)** and led by the **Technical Committee on Factory Automation (TCFA)**, will be hosted by the University of Pavia (Italy) in collaboration with the Institute on Industrial IT (inIT) of the Technische Hochschule OWL in Lemgo, Germany.

Pavia is located in south-western Lombardy (northern Italy, 35 kilometers - 22 miles - south of Milan). The University of Pavia is one of the world's oldest academic institutions, with its foundations existing as early as the 9th Century.

FOCUS

The conference mainly focuses on: Communication Systems and Technologies; Protocols and Standards for Networked Embedded and Cyber-Physical Systems; Real-time, Safety, Security and Maintenance of Automation Systems and Networks; applying Artificial Intelligence and Machine Learning to enhance and Communication Technologies for Industry 4.0; Low-power and Green Communication in Industry; recent advances in research domains with similar communication requirements.

PAPER SUBMISSION

Regular/Special Session Papers: up to 8 double-column pages, following the IEEE conferences template.

Work-in-Progress (WiP) Papers: up to 4 double-column pages, following the IEEE conferences template. Accepted WiP papers will be published in the conference proceedings.

Website: wfcs22.unipv.it



IMPORTANT DATES

Special session proposals
(confirmed):

Deadline: December 17th, 2021
Notifications: December 21st, 2021

Regular and SS submissions
(extended):

Deadline: February 7th, 2022
Notifications: March 1st, 2022
Final versions: March 12th, 2022

WiP submissions
(extended):

Deadline: March 10th, 2022
Notifications: March 25th, 2022
Final versions: April 4th, 2022