



## Lecture Series 2024 - IEEE SMC Italy Chapter Human-centered Cyber Security

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On line: [LINK](#)

#### Abstract:

This talk will focus on safety and security issues in Cyber Physical Human Systems (CPHS). These systems represent a growing field of research in which humans, physical systems, and enabling cyber technologies are deeply interconnected through complex interactions to achieve specific goals. This approach contrasts with the traditional view of humans as isolated operators or users of the system. In addition, this shift presents a number of challenges, particularly in managing the uncertainties that human involvement can introduce while keeping systems secure. Unlike traditional IT systems, security breaches in CPHS can have real-world physical consequences, causing harm to people, the environment, or equipment. A holistic approach to safety and security is critical, as one must not compromise the other. This talk will present the major achievements in this area, as well as the challenges posed by new technologies.



**Bio:** Federica PASCUCCI was born in Roma, Italy, on October 8, 1975. She received the Laurea Degree (M.S.) in Computer Science and Control Engineering from University of Roma Tre in 2000 and the PhD Degree in Systems Engineering from the University of Rome "La Sapienza" in 2004. Since 2006, she is Assistant Professor of Robotics and Automatic Control at the University of Roma Tre, where she is currently Associate Professor. Her research interests are in the field of robotics, cyber-physical systems, analysis and design of networked embedded control systems, with applications to sensor actuators networks. She addresses resilient design of cyber-physical systems, critical infrastructures, water distribution systems, and energy systems. She has published over 100 journal and conference papers and book chapters. With the HCPS-Lab group, she has been principal investigator in several international research projects and in many national projects.