Panel: Safety, Reliability, and Security (SRS) of Autonomous Systems

As autonomous systems become more prevalent in domains such as transportation, maritime operations, industrial automation, aerospace, and human-robot collaboration, ensuring their safety is a shared challenge across disciplines. This panel brings together experts from four distinct backgrounds, control theory, human factors, marine risk and safety, and assurance of intelligent systems, to explore how their respective fields approach the overarching topic of trust in autonomous systems. Rather than individual presentations, the session is structured as a guided conversation focused on four unique perspectives, encouraging dialogue and integration across disciplines.

Organized by the International Workshop on Autonomous System Safety.

Website

LinkedIn

Panellists

Prof. Dr.-Ing Dirk Söffker – University of Duisburg-Essen

Prof. Dr.-Ing. Dirk Söffker is Chair of Dynamics and Control at the University of Duisburg-Essen and has been a full tenured professor for over 20 years. Since 2023, he also serves as the Head of the Department of Mechanical and Process Engineering and as Vice Dean of the Faculty of Engineering. His research spans modern control theory—including observer design and model-free approaches—human interaction with safety-critical systems, and the safety and reliability of technical systems. Since 2001, he has expanded his focus to cognitive technical systems, emphasizing human supervision and the development of autonomous, learning- and planning-capable machines.

With more than three decades of academic service, Prof. Söffker has supervised over 50 PhD theses and remains actively involved in advancing interdisciplinary research at the intersection of control, cognition, and safety.

🖥 **https://www.uni-due.de/srs/index_en.shtml** | ✉ **soeffker@uni-due.de**

in **https://www.linkedin.com/in/dirk-soeffker**

Prof. Dr. Ingrid B. Utne – NTNU

Prof. Dr. Ingrid Bouwer Utne is a Professor at the Department of Marine Technology, NTNU, where she performs research on risk assessment and modeling of marine and maritime systems. Dr. Utne is a Principal Investigator and Project Manager of the ORCAS and Safeguard research projects, which focus on supervisory risk control, bridging risk modeling with control systems theory and AI, aiming to enhance safety and intelligence in autonomous systems. In 2024, she was awarded an ERC Advanced Grant (BREACH) on autonomous systems safety.

🖥 **ntnu.edu/employees/ingrid.b.utne** | ✉ **ingrid.b.utne@ntnu.no**

in **https://www.linkedin.com/in/ingrid-b-utne**

Dr. Maria Chiara Leva – TU Dublin

Maria Chiara Leva is the lead of the Human Factors in Safety and Sustainability Research Group. And co chair of the Master for Occupational Health and Safety and Human factors in Technological University Dublin. She is the co-chair of the technical committee for Human Factors and Human reliability analysis for the European Safety and Reliability Association. Chiara is the coordinator since January 2021 of a Large Marie Curie Training Network on collaborative Intelligence for Safety Critical Tasks called "CISC" also promoting the role of Female early stage researcher in this area (www.cisproject.eu). She received the award as leader of the best multidisciplinary research group in TU Dublin and In 2016 she was awarded by Enterprise Ireland and the National Digital Research Centre a Female founder competitive Start fund for her Campus Company Tosca Human Factors Solutions. Dr Leva has more than 80 publications on Human Factors, Operational Risk Assessment and Safety Management in Science and Engineering Journals, she is a member of the editorial board for two of those journals.

🖥 **https://www.tudublin.ie/mariachiaraleva** | ✉ **mariachiara.leva@TUDublin.ie**

🔗 **https://www.linkedin.com/chiara-leva**

Dr. Marc Zeller – Siemens

Marc Zeller works as a Senior Key Expert at Siemens Foundational Technologies in Munich. His research interests are focused on the safety assurance of AI-based systems as well as the efficient and effective development of dependability-relevant systems using model-based engineering techniques. Moreover, he is co-lead of the Siemens wide research program "Engineering and Validation of Intelligent Systems". Marc Zeller received a diploma in Computer Science from the Karlsruhe Institute of Technology (KIT) in 2007 and obtained a PhD in Computer Science from the University of Augsburg in 2013. With over 10-years' experience in different industrial domains, such as automotive, railway, avionics, or industry automations, he has been involved in various industrial projects as safety expert and is author of over 70 international publications.

🖥 **https://marc-zeller.github.io** | ✉ **marc.zeller@siemens.com**

🔗 **https://www.linkedin.com/in/marc-zeller/**