

Call for Papers

SAFECOMP 2022

The 41st International Conference
on Computer Safety, Reliability and Security

September 6 – 9, 2022
Munich, Germany



ABOUT SAFECOMP

Established in 1979 by the European Workshop on Industrial Computer Systems, Technical Committee 7 on Reliability, Safety and Security (EWICS TC7), SafeComp has contributed to the progress of the state-of-the-art in dependable application of computers in safety-related and safety-critical systems. SafeComp is an annual event covering the state-of-the-art, experience and new trends in the areas of

safety, security and reliability of critical computer applications. SafeComp provides ample opportunity to exchange insights and experience on emerging methods, approaches and practical solutions. It is a single-track conference allowing easy networking.

www.safecomp2022.com

SAFECOMP 2022 KEY THEME

New frontiers of safety assurance

TOPICS

The conference covers the development, assessment, operation, and maintenance of safety-related and safety-critical computer systems. Major topics include, but are not limited to:

- \\ Development, verification, assessment and licensing
- \\ Model-based safety analysis, design, and assessment
- \\ Formal methods for verification, validation, and fault tolerance
- \\ Fault detection and recovery mechanisms
- \\ Resilient and fault-tolerant HW and SW architectures
- \\ Distributed and real-time monitoring and control
- \\ Safety/security co-engineering and risk assessment
- \\ Testing, verification, and validation methods and tools
- \\ Qualification, assurance, and certification methods and tools
- \\ Cyber-physical threats and vulnerability analysis
- \\ Safety and security guidelines, standards and certification
- \\ Safety and security assurance cases

CONFERENCE PROCEEDINGS

All accepted regular papers, practical experience reports and tool descriptions will be published by Springer in the LNCS Series.

The SafeComp 2022 theme „New Frontiers of Safety Assurance“ addresses the following topics:

- \\ new principles, paradigms, and methodologies including new approaches such as dynamic safety management or data-driven assurance
- \\ open systems of systems
- \\ machine learning
- \\ over-the-air-updates and app-like platforms
- \\ cloud-based control of safety-critical systems

INTERNATIONAL PROGRAM COMMITTEE

Albert, M. (DE)	Favaro, J. (IT)	Katoen, J. (DE)	Sangchoolie, B. (SE)
Becker, U. (DE)	Flammini, F. (SE)	Koopman, P. (US)	Schneider, D. (DE)
Bishop, P. (UK)	Fuerst, S. (DE)	McDermid, J. (UK)	Schoitsch, E. (AT)
Bitsch, F. (DE)	Gallina, B. (SE)	Ortmeier, F. (DE)	Seguin, C. (FR)
Boydens, J. (BE)	Gorski, J. (PL)	Pai, G. (US)	Sokolsky, O. (US)
Bologna, S. (IT)	Grosspietsch, K. (DE)	Palanque, P. (FR)	Steiner, W. (AT)
Bondavalli, A. (IT)	Grunske, L. (DE)	Papadopoulos, Y. (UK)	Sujan, M. (UK)
Braband, J. (DE)	Guiochet, J. (FR)	Paulitsch, M. (DE)	Taguchi, K. (JP)
Burton, S. (DE)	Habli, I. (UK)	Pfeifer, H. (DE)	Törngren, M. (SE)
Casimiro, A. (PT)	Halang, W. (DE)	Popov, P. (UK)	Tonetta, S. (IT)
Daniel, P. (UK)	Heisel, M. (DE)	Rae, A. (AU)	Trapp, M. (DE)
Denney, E. (US)	Jia, Y. (UK)	Rossi, M. (IT)	Troubitsyna, E. (SE)
Di Giandomenico, F. (IT)	Heyl, A. (DE)	Rothfelder, M. (DE)	Waeselynck, H. (FR)
Ehrenberger, W. (DE)	Kaiser, B. (DE)	Saglietti, F. (DE)	

PAPER SUBMISSIONS

The tradition of SafeComp is to act as a platform for bringing together academic research and industrial needs. In 2022 we want this industrial and real-world experience to be a strong element of the conference.

We solicit two types of papers:

- 1. Research papers**, that should describe the research gap that is addressed and explain how the proposed contribution advances current knowledge (up to 14 pages incl. bibliography);
- 2. Practical experience reports / tool descriptions**, that should convey a clear message and lessons for practitioners (up to 14 pages incl. bibliography).

All papers will be reviewed by three members of the Program Committee. Papers must not have been previously published or concurrently submitted elsewhere.

WORKSHOPS

It is planned that Tuesday 6 September will be a day of workshops. Proposals are welcome.

CONFERENCE CHAIRS

EWICS TC7 Chair

\\ Francesca Saglietti (Univ. Erlangen-Nuremberg, DE)

Conference Chairs

\\ Mario Trapp (Fraunhofer IKS, DE)

\\ Francesca Saglietti (Univ. Erlangen-Nuremberg, DE)

Workshop Chairs

\\ Jérémie Guiochet (LAAS-CNRS, FR)

\\ Erwin Schoitsch (AIT, AT)

Industry Chair

\\ Simon Fürst (BMW, DE)

Publication Chair

\\ Friedemann Bitsch (Thales GmbH, DE)

Local Organisation Chair

\\ Simon Burton (Fraunhofer IKS, DE)

Organisation Committee

\\ Martin Simon (Fraunhofer IKS, DE)

\\ Eva von Wardenburg (Fraunhofer IKS, DE)

IMPORTANT DATES

\\ Workshop submission: **7 February 2022**

\\ Paper abstract submission: **7 February 2022**

\\ Full paper submission: **14 February 2022**

\\ Notification of acceptance: **29 April 2022**

\\ Camera-ready submission: **27 May 2022**

ABOUT MUNICH



Located in the foothills of the Bavarian alps, Munich is a modern metropolis but at the same time a historic and traditional city that offers a large amount of attractions to discover.

Munich is rich in imposing architectural sites like the neo-Gothic town hall at Marienplatz or the Italian-style Odeonsplatz with numerous famous landmarks. The city is known for its green spaces especially the English Garden which is even larger than Central Park.

As Munich is home to many museums with collections from science and technology in the Deutsche Museum to classical and contemporary art in the Pinakotheken, there is always something new to explore!

→ www.muenchen.de/int/en



CONFERENCE VENUE



The conference will take place at the research campus in Munich-Garching, north of the city center.

\\ **Workshop location:** Science Congress Center
Munich, Walther-von-Dyck-Straße 10, 85748 Munich-Garching

\\ **Conference location:** Fraunhofer AISEC,
Lichtenbergstraße 11, 85748 Munich-Garching

The locations are well connected to Munich airport, Munich central station as well as the highway and provide a modern setting for SafeComp 2022. A list of hotels within close distance can be found on the website of SafeComp 2022.

PARTNERS



www.safecomp2022.com