

COMMITTEE

Conference Chairs

- Thomas Otto, Fraunhofer ENAS
- Harald Kuhn, Fraunhofer ENAS
- Stefan Finkbeiner, Bosch Sensortec GmbH

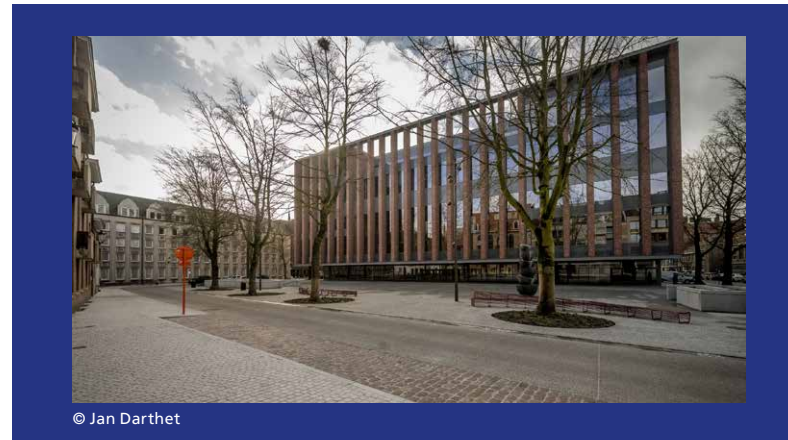
Core Team

The conference is prepared by the new core team, which includes high-level experts from industry as well as from basic and applied research organisations:

- Klas Brinkfeldt, RISE
- Sywert Brongersma, IMEC
- Wolfgang Dettmann, Infineon Technologies AG
- Thomas Dietrich, IVAM
- Roland Dörr, microTec Südwest
- Albrecht Donat, Siemens AG
- Luis Fonseca, Centro Nacional de Microelectronica (CNM-IMB)
- Paddy French, TU Delft
- Rainer Günzler, Hahn-Schickard
- Matthias Kühnel, Robert Bosch GmbH
- Christoph Koegler, Infineon Technologies AG
- Antonio Lionetto, STMicroelectronics
- Alan O'Riordan, Tyndall
- Jean-Philippe Polizzi, CEA LETI
- Harald Pötter, Fraunhofer IZM
- Sven Rzepka, Fraunhofer ENAS
- Elisabeth Steimetz, EPoSS
- Bart Vandeveld, IMEC
- Christian Wagner, Fraunhofer ENAS

The scientific committee will be published on the webpage.

VENUE



The Smart Systems Integration Conference takes place 28–30 March 2023 in Bruges, Belgium. The conference venue is the Bruges Meeting & Convention Centre offering an excellent space for plenary presentations, poster sessions and group discussions. In 2023, the SSI is co-located with the apc|m europe including joint access and networking spaces to enable scientific exchange between both events and communities.

The technical organisation is realised by

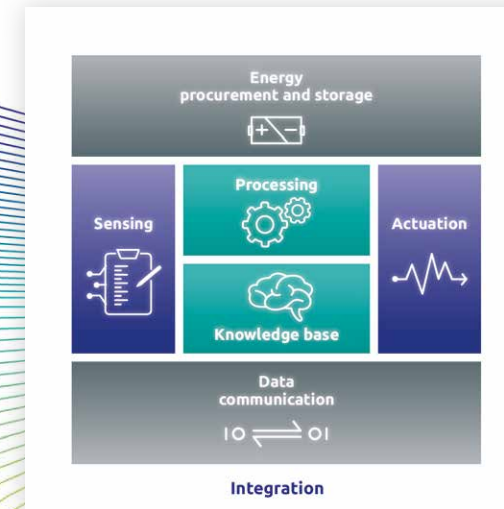
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smartsystemsintegration

INTERNATIONAL CONFERENCE AND EXHIBITION
ON SMART SYSTEMS INTEGRATION



CALL FOR PAPERS

CONFERENCE AND EXHIBITION
28–30 MARCH 2023



INVITATION

The Smart Systems Integration Conference intends to cover all aspects of system integration, from System on Chip (SoC) via System in Package (SiP) to System of Systems (SoS) – both, hardware and software aspects. Its key mission is to connect the Smart Systems community and to align research activities along the whole value chain for future smart and sustainable system solutions.

The conference connects researchers from academia and industry as well as policy and decision makers. The three-day event is commonly organised by Fraunhofer ENAS together with the European Association on Smart Systems Integration – EPoSS to link technology and policy aspects in one event. It is technically supported by Silicon Saxony.

The envisaged European autonomy on chips and the requirements for secure communication, politically and financially subsidised by the European Chips act, enhances the demand for joint efforts for integrated smart and sustainable system solutions on all levels. A special topic session at the Smart Systems Integration 2023 will be dedicated to the security of Smart Systems. This session will address connectivity and secure intelligence at the edge as key challenges to implement secure Smart Systems in everyday life and to increase their social acceptance. Beyond research and development topics, EPoSS as a co-organiser will hold sessions on strategy and business creation as well as on impact resulting from European funded projects in the domain of SSI.

In an engaging and compact format, the conference provides a unique and valuable opportunity to interact with the stakeholders of the Smart Systems community along the value chain by means of technical sessions comprising talks and poster pitches, strategy panels, podium discussions and exhibition booths. RTOs, SMEs and industry share their latest approaches and results. On behalf of the whole committee – we are looking forward to receiving your innovative abstracts.

Prof. Thomas Otto,
Prof. Harald Kuhn
Conference Chairs

Dr. Stefan Finkbeiner
Conference Chair
Industry

TIMELINE

SUBMISSION OPPORTUNITIES

TRACKS

TRACKS

Deadlines

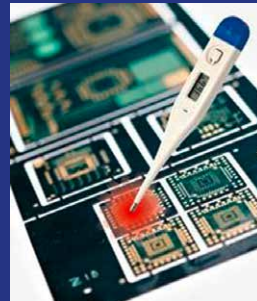
- **Abstracts submission**
 - Start 12 September 2022
 - **Extended deadline 30 November 2022**
- **Deadlines for scientific papers**
 - Selection by committee 16 December 2022
 - Submission of full paper 30 January 2023
 - First peer review 28 February 2023
 - First revision revised paper 24 March 2023

There are two opportunities for paper submission.

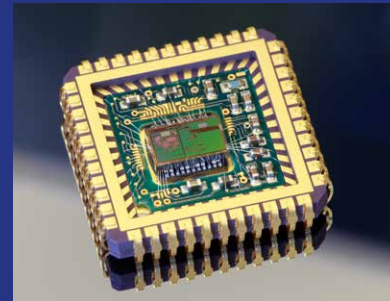
- Scientific papers can be submitted for publication in IEEE Explore®. Full scientific papers (min. 4 pages) undergo a rigorous peer review process.
 - It is possible to publish a non-scientific paper in the conference proceedings, only.
 - Industry and European projects are kindly encouraged to submit contributions for oral presentation and optionally submit a paper.
- Conference language: English



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© RISE IVF



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EPoSS Working Group Meetings and Preevent

28 March 2023

Conference

29–30 March 2023

Exhibition

28–30 March 2023

Conference Dinner

29 March 2023

Online Abstract Submission
until 30 November 2022

Selection Process

The committee will review all the abstracts. Submitted abstracts are selected for oral or poster presentation. Conference proceedings will be available online.

Oral and Poster Presentations

Two parallel sessions will be held at the conference. To highlight the networking aspect special focus is on poster presentations, in parallel to selected oral presentations. Poster authors will have the possibility to present their posters in a dedicated session as well as throughout the conference. All scientific oral and poster presentations will be included in the conference proceedings. The proceedings will be additionally published open access.

www.smartsystemsintegration.com
Questions concerning submission: ssi@silicon-saxony.de

Track 1

Recent developments in the building blocks (components) of Smart Systems

This track contains new and innovative components of Smart Systems without any technology limitations, however a clear link to applications via further system integration

- Single components and new sensor technologies
- Advanced micro/nano and smart power technologies
- Novel concepts for smart sensing, control, actuation and energy supply
- Smart low-cost approaches including roll-to-roll technologies and printed functionalities
- Disruptive innovations in terms of functionality, accuracy, autonomy, automation, cost, size, ...
- Novel topics of Smart Systems, such as quantum sensing, photonic integrated circuits and new materials

Track 2

System integration aspects concerning hardware and software

This track is focused on the different integration aspects like:

- Integration of different functionalities (energy management, communication, data analysis, knowledge based data processing, ...)
- Green, environmentally-friendly, recyclable aspects of system integration
- 2.5/3D integration, interconnect technologies and packaging the electronics and all associated sensors/actuators etc.
- Heterogeneous integration for Smart Systems
- Software integration, firmware
- Reliability and security aspects (methodologies and concepts for reliability, safety, and security)

Track 3

Application Domains

This track covers all application domains from healthy living, food, biomedical to mobility, energy and industry

- Smart Systems with a TRL level of min. 6 for dedicated application within the different domains
- This includes
 - AI based smart sensor systems and networks, control units and drives incl. aspects such as power electronics, as well as communication systems for all application fields
 - Secure, reliable, decentralized, multi-modal systems
 - Ultra-flexible, high-performing, energy and resource efficient, and collaborative systems for different applications
 - Digital twins supporting from design to customer service

Track 4

Strategy and Business Creation

- Policy talks will be invited. The Call for Paper is open for following topics:
 - Smart System solutions created by start-ups and SMEs
 - Results of industrial partners and impact gained in funded European projects
- Standardization topics
- Presentations of European and local networks CSAs related to SSI topics, Digital Innovation Hubs

Track 5 – Special track of SSI2023

Security of Smart Systems

This track is a special track for the SSI2023. It will be introduced by a general keynote and can be extended by a panel of experts. Companies and RTOs working in this field are encouraged to submit an abstract.

- Hardware encryption, key generation and storage, authenticity of integrated circuits, prevention of hardware attacks
- Software security and integrity, AI security, signal and input validation, firmware hardening
- System and IoT security, considering the function of the system as a whole, communication security, quantum communication