



Forum on specification & Design Languages

14 – 16 September 2022 | Linz, Austria

The 25th *Forum on specification and Design Languages (FDL)* is an international event where academics and industrials exchange their experiences, advances and the new trends in the languages and techniques used along any phase of the development process of hardware and platform based Cyber Physical Systems. The targeted systems encompass distributed, real time, embedded systems, mechatronics, IoT, reactive systems amongst others; not only for the software part but also at the system level, i.e., including different concerns like for instance the hardware platform and the physical environment.

FDL stimulates scientific and controversial discussions within and in-between scientific topics at different maturity levels.

FDL is based on four non-limiting scientific pillars. Cross-fertilization between them, e.g., in the context of System Engineering, is of great interest.

Language: Domain-Specific Languages for software, execution platforms, allocations, environment, contracts, abstraction/refinement are of interest, together with the associated design methods and frameworks.

Simulation: innovative simulation techniques, virtual prototypes, digital twins, collaborative simulation, hybrid simulations or runtime abstraction/refinement are of interest, with a special attention on efficiency and correctness of the simulations and the underlying tools and frameworks.

Semantics: formal definition, compilers, interpreters, typing, abstraction/refinement are of interest, together with the underlying specification frameworks or new approaches for their specification, modelling and model transformation.

Verification and Analysis: beyond simulation, innovative static analysis, testing, debugging, model checking, artificial intelligence-based analysis or design space exploration are of interest, together with the underlying models, tools and frameworks.



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Submissions:

We solicit submissions of **full research papers (6 to 8 pages)**, for oral presentation, which cover novel and complete research work supported by experimental results. We also solicit submissions of **short papers (4 pages)**, for interactive presentations / posters. Furthermore, we solicit submissions for a **PhD/Work in Progress Forum (2 pages)**.

Authors should submit papers in double column, IEEE format as PDF through the online submission system.

Call for Special Sessions:

Special Sessions should propose a topic which is of particular interest to the FDL audience. They consist of two to four invited talks. Speakers are requested to either submit a one-page abstract of their presentation, or to submit a short or full paper that goes through the regular review and publication process.

Potential organizers of a Special Session must submit a brief proposal (no more than two pages) which describes the topic, the intended audience, as well as a list of possible speakers to fdl2022@easychair.org.

Publications:

All accepted papers (long, short, WiP, poster) will appear in the informal electronic proceedings, handed out at the conference.

Long and short papers will be published in electronic form on **IEEE Xplore** with an ISSN and an ISBN number.

For the last 3 years, **extended versions of selected papers have been published as a special issue of the ACM Transactions on Embedded Computing Systems (TECS)**.



General Chair: Daniel Große | Johannes Kepler University Linz

Program Chair: Sara Vinco | Politecnico di Torino

Special Session Chair: Francisco Cazorla | Barcelona Supercomputing Center

Tutorial Chair: Michael Mandler | Bamberg University

PhD/WiP Chair: Christoph Grimm | TU Kaiserslautern

Finance Chair: Franco Fummi | Univ. of Verona

Publication Chair: Gianvito Urgese | Politecnico di Torino

Publicity Chair: Julio Medina | Univ. of Cantabria

Web Chair: Stefano Spellini | Univ. of Verona

Panel Chair: Reinhard von Hanxleden | Kiel University

Important Deadlines

(23:59 Anywhere on Earth):

Special Sessions: March 17, 2022

Paper Deadline: May 23, 2022

PhD/WiP Deadline: June 1, 2022

Author Notification: June 27, 2022

Final Version: July 16, 2022