

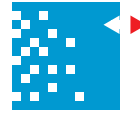
About edaWorkshop

The edaWorkshop is the premier German event on "Electronics, Design and Applications" (EDA). It offers excellent opportunities for the publication and discussion of application-oriented EDA research results. The mix of participants from industry and academia creates ideal opportunities for a professional exchange of ideas on a scientific basis. This interaction paves the way for industry to benefit from research results.

The edaWorkshop is also the primary platform for presenting and exchanging solution approaches and results of those research projects in the area of "Electronics,

Design and Applications," which are funded by the BMBF (Federal Ministry of Education and Research, Germany). It promotes communication between experts and public authorities, and supports the dissemination of the results of publicly-funded projects.

The edaWorkshop is organized jointly by the edacentrum and the GI/GMM/ITG RSS Steering Group for "Computer-aided Circuit and System Design" and is supported by the BMBF. Like in 2009, 2011 and 2013, the edaWorkshop15 will co-locate and share a common day – including keynotes, sessions and the social event – with



edaWorkshop 15

the annual CATRENE Design Technology Conference (CATRENE DTC).

The three-day event is a balanced combination of information and communication. It offers not only a wide range of discussions on specialized subjects and EDA research projects, but also provides plenty of networking opportunities. This is supported by a comprehensive poster exhibition,

where also demonstrations and prototypes will be presented.

Researchers and users are invited to submit contributions; in particular, EDA project teams are invited to submit their results in both, talks and posters.

You will have plenty of opportunity to bring your topics and results to the edaWorkshop. You can find the details overleaf under „Submission of contributions“

Take the opportunity for a technical exchange between science and industry. - We are looking forward to your contribution!



ITG



GMM



Submission of contributions

In addition to the presentation of EDA research projects and their results, the edaWorkshop aims at the publication of industrially-relevant R&D results covering topics listed overleaf. Expected are contributions to one of the 6 categories on the right.

Scientists and users are invited to submit contributions without author and company names on five to six pages, preferably in English, at www.edacentrum.de/edaworkshop/upload/. Guidelines for authors as well as the templates (Word and LaTeX) can be found at: www.edacentrum.de/edaworkshop/call/.

For the latest information see: www.edacentrum.de/edaworkshop

Expected are:

1. Scientific contributions from research and industry which present new EDA research and development results
2. Presentations of EDA topics of a visionary or survey character, with scientific or practical impact
3. Contributions concerning the application relevance and/or the economic impact of technical challenges and solutions
4. Reports on experiences or on the dissemination of results from industrial practice
5. Demonstrations of research and development results, in particular those from ICT 2020 and CATRENE projects
6. Presentations or sessions on R&D projects demonstrating the applications of microelectronics.

Starting this year, also submissions are encouraged which address the increasing need to consider application aspects during the design process, in particular bridging the gap in the value chain between applications and chip design.

The program committee will review the contributions in order to compose a program of presentations, posters and demonstrations. Accepted contributions will be published in the edaWorkshop proceedings, which will appear in the VDE-Verlag with an ISBN. The proceedings will not distinguish between poster, presentation and demonstration contributions – all contributions are equally important to our common goal.

Conference language will be English.

Key dates

January 19, 2015
Submission of papers

February 16, 2015
Notification of acceptance

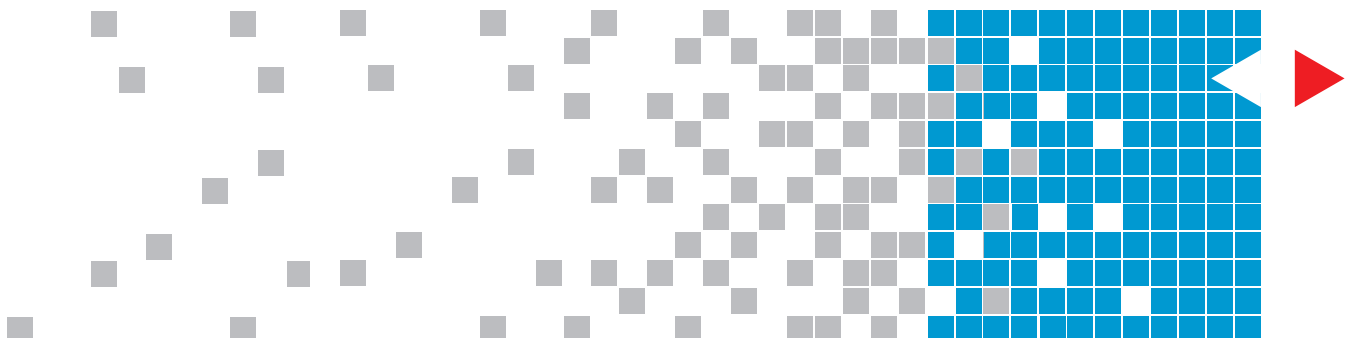
March 30, 2015
Submission of camera-ready papers

May 19 – 21, 2015
edaWorkshop in Dresden

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Call for Papers



edaWorkshop 15

Dresden, May 19 – 21, 2015

www.edacentrum.de/edaworkshop

The edaWorkshop combined with the CATRENE DTC – Catalyst of research on Electronics, Design and Applications

The design of integrated circuits and systems places enormous demands on R&D engineers and design methods and tools that they use. It requires the efficient and manufacturing-aware development of safe, economical, robust and reliable systems of high complexity with very small structures and the design of analog and mixed-signal circuits.

In addition, most integrated circuits today contain not only a 'system on chip' (SoC), they also comprise large systems which are essential parts of applications. A new (product) design concept along the entire value chain with close interaction between electronics, design and

applications (EDA) is necessary to speed-up innovation. This requires the integration of application domain knowledge into the design process, including design methodologies and tools. It comprises management of requirements, design along all levels of abstraction and the consideration of extra-functional properties.

Within the scope of its funding programme for information and communication technologies (ICT 2020) the BMBF (Federal Ministry of Education and Research, Germany) supports research activities in the area of "Electronics, Design and Applications". Currently funded projects predominantly aim at developing application-specific

design platforms for complex systems and circuits. The EDA-industry forms an important link between semiconductor manufacturers and OEMs, and EDA-related research projects within ICT2020 foster collaboration along the value chain. ICT2020 focuses on fields of application that play a decisive role for the future strength of the German economy, such as automotive/mobility, automation and medical technology. Some projects within ICT 2020 are part of European collaborations, for example within the programme EUREKA-CATRENE.

This event is a central platform for exchanging information

concerning the approaches and results of projects from ICT 2020 and CATRENE as well. Experts involved in the projects will be invited to present their results by means of talks and posters. At the heart of these presentations on electronics, design and applications will be the relevance of the applications to topics affecting society (as defined by ICT 2020 and CATRENE White Book B). As a second essential part of the event, project presentations will be supplemented by a selection of peer-reviewed scientific papers on R&D results.

For information on CATRENE see www.catrene.org.

edaWorkshop15 Topics

Submissions covering the following topics are welcome:

System Level and Hardware/Software Design of Embedded Systems

- Specification- and Model-based Design
- Architectural Synthesis and Optimization
- Advanced Architectures (ASIPs, SoCs, MPSoCs, NoC, SiPs and Reconfigurable Architectures)
- Transaction Level Modeling and Simulation
- Development and Optimization of Hardware-dependent Software

- Design Automation for Analog Circuits
- Synthesis, Simulation and Verification
- RF Circuits, Smart Power Circuits
- Model Generation
- Parasitics and Interconnects
- Signal Integrity and EMC

Analog- and Mixed-Signal Design

Design and Verification

- Formal Verification
- Statistical Timing Analysis and Variability
- Low Power Design, Analysis and Optimization
- Logic- and Technology-dependent Synthesis for Nanometer Circuits
- Physical Design and Verification
- Simulation Acceleration and Rapid Prototyping
- Productivity and Efficiency of Design

- 3D Design, Packaging and SiP
- Design for Integration of Multi-Domain components
- Energy Efficient Design
- Analysis and Optimization of Performance and Power
- Cyber-Physical Systems
- Design for New Technologies
- Design for Specific Applications

More than Moore

- Design for Reliability and Robustness
- Modeling of Aging Effects
- Design Centering and Yield Optimization (DfM)
- Fault-tolerant and Self-healing System Design
- System Test and Production Test
- Delay Test and Defect-oriented Test
- BIST and Design for Testability
- Test Generation, Diagnosis and Fault Modeling
- Test of Regular Structures

Reliability, Robustness and Test

Committees of the edaWorkshop

General Chairs of the edaWorkshop

- W. **Nebel**, OFFIS - Institute for Information Technology, edacentrum
- W. **Rosenstiel**, U Tübingen, edacentrum

Program Committee

Chair:

- U. **Schlichtmann**, TU München

- W. **Anheier**, U Bremen
- M. **Dietrich**, Fraunhofer Institut für Integrierte Schaltungen
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- G. **Kornmann**, Intel Mobile Communications
- R. **Pferdmenges**, Infineon Technologies AG
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- R. **Sommer**, IMMS gGmbH
- P. **van Staa**, Robert Bosch GmbH
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- W. **Glauert**, U Erlangen-Nürnberg
- L. **Hedrich**, U Frankfurt
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- M. **Reuter**, Mentor Graphics GmbH
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- A. **Herkersdorf**, TU München
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- S. **Sattler**, U Erlangen-Nürnberg
- H. **Schmidt-Habich**, Infineon Technologies AG
- J. **Teich**, U Erlangen-Nürnberg

- J. **Haase**, edacentrum
- D. **Treytnar**, edacentrum
- V. **Schanz**, ITG in VDE
- R. **Popp**, edacentrum
- P. **Federer**, GI
- R. **Schnabel**, VDE/VDI-GMM

Organization Committee