About edaWorkshop

The edaWorkshop is the premier German EDA event for the publication and discussion of application-oriented EDA research results. The mix of representatives from industry and academia creates ideal opportunities for a professional exchange of ideas on a scientific basis. This dialog can pave 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 EDA projects funded by the BMBF (German Ministry of Education and Research). It promotes communication between EDA experts and public authorities, and supports the dissemination of the results of publicly-funded projects.

The edaWorkshop is organized jointly by the edacentrum and BMBF and the GI/GMM/ITG RSS Steering Group for "Computer-aided Circuit and System Design". Like in 2009 and 2011, the edaWorkshop13 will co-locate and share a common day – including keynotes, sessions and the social event – with the annual CATRENE Design Technology Conference (CATRENE DTC), successor of the MEDEA+ DAC.

edaWorkshop 13

The three-day event is a balanced combination of information and communication. It not only offers 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 demonstrations and prototypes will also be presented.

Scientists 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!

Bundesministerium für Bildung und Forschung

edacentrum

ITG

Gesellschaft für Informatik

GMM

CATRENE

EUREKA

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 IKT 2020 and CATRENE projects
6. Presentations or sessions on R&D projects demonstrating the applications of microelectronics.

The program committee, consisting of leading EDA experts (named overleaf) from industry and research, will review the contributions by category 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 10, 2013
Submission of papers

February 6, 2013
Notification of acceptance

March 20, 2013
Submission of camera-ready papers

May 14 – 16, 2013
edaWorkshop in Dresden

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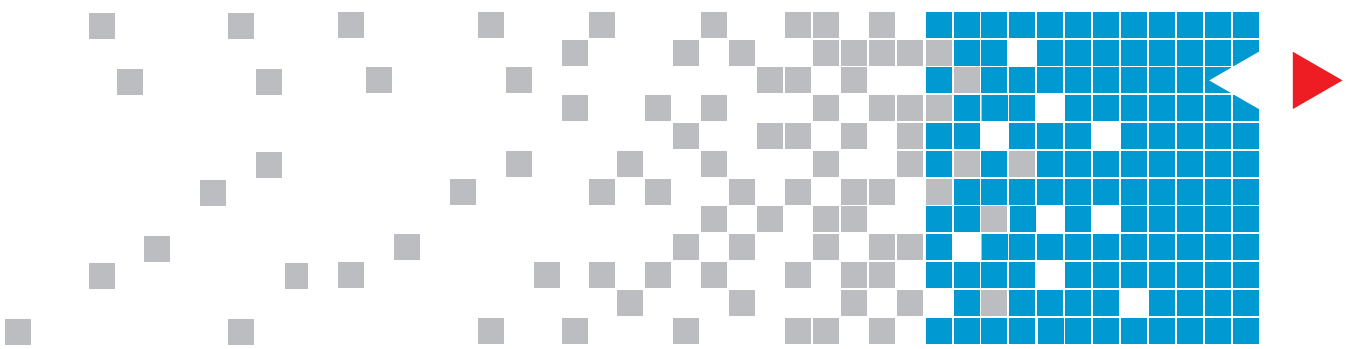
Call for Papers



edaWorkshop 13

www.edacentrum.de/edaworkshop

Dresden, May 14 – 16, 2013

The edaWorkshop combined with the CATRENE DTC – Catalyst of EDA research

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 (< 32 nm), and the design of analog and mixed-signal circuits.

In order to stimulate EDA research activities to cope with these challenges the BMBF (Federal Ministry for Education and Research) has established a special R&D program. It is dedicated to design platforms for complex applied systems and circuits and is embedded into the BMBF research program for information and communication technology (IKT 2020). In IKT 2020 EDA-projects industry and academia join forces with the public authorities to support those areas that are vital for the competitiveness of the German industry. There are five application fields with a potentially high added value, and with considerable potential for job creation: automotive/mobility, mechanical engineering/automation, health/medicine, logistics/services and energy/environment. In many cases projects on these application fields include European-wide collaboration, they are contributing to the research program of CATRENE. IKT 2020 and CATRENE complement each other and offer a lot of valuable synergies.

This event is a central platform for exchanging information concerning the approaches and results of projects from IKT 2020 and CATRENE as well. People involved in the projects will be invited to present their results by means of talks and posters. At the heart of these presentations will be the relevance of the applications to topics affecting society (as defined by IKT 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.

In this year the edaWorkshop is jointly organized with the annually CATRENE Design Technology Conference (DTC). Hence it provides a comprehensive overview of latest algorithms and tools, emerging technologies, key CATRENE and IKT 2020 projects, and advanced research in application-oriented SoC design automation in Europe. The joint event will be organized with a CATRENE DTC day (May 14), an edaWorkshop day (May 16), and a joint day common to both (May 15).

For information on CATRENE see www.catrene.org.

edaWorkshop13 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 Optmization
- Advanced Architectures (ASIPs, SoCs, MPSoCs, NoC, SiPs and Reconfigurable Architectures)
- Transaction Level Modeling and Simulation
- Development and Optimization of Hardware-dependent Software

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

Analog- and Mixed-Signal Design

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

More than Moore

- 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

Reliability, Robustness and Test

- 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

Committees of the edaWorkshop

General Chairs of the edaWorkshop

- E. **Barke**, U Hannover, edacentrum
- W. **Rosenstiel**, U Tübingen, edacentrum

Program Committee

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- W. **Anheier,** U Bremen
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- O. **Bringmann**, U Tübingen
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- L. **Hedrich**, U Frankfurt
- A. **Herkersdorf**, TU München
- S. **Huss**, TU Darmstadt
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- R. **Sommer**, IMMS GmbH
- P. **van Staa**, Robert Bosch GmbH
- N. **Wehn**, TU Kaiserslautern
- H.-J. **Wunderlich**, U Stuttgart

Organization Committee

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