

final call for papers

DATE **11**

**Design, Automation
& Test in Europe**

**Grenoble, France
March 14 - 18, 2011**

www.date-conference.com

KEY DATES **submission key dates**

D, A, T and E papers
Deadline is Sunday, September 5, 2010

Special Session proposals
Deadline is Sunday, September 5, 2010

Tutorial proposals
Deadline is Sunday, September 5, 2010

Friday Workshop proposals
Deadline is Sunday, September 5, 2010

Exhibition Theatre
Deadline is Sunday, October 10, 2010

PhD Forum
Deadline is Friday, November 12, 2010

Notification of acceptance
Deadline is Sunday, November 7, 2010

Camera-ready paper due date
Deadline is Monday, December 6, 2010

University Booth proposals
Deadline is Friday, January 14, 2011

INSTRUCTIONS **submission instructions**

All manuscripts for any technical topic of the D, A, T and E tracks must be submitted for review electronically, following the instructions on the conference Web page:

www.date-conference.com

The accepted file format is PDF. Any other format and manuscripts received in hard-copy form will not be processed.

Papers can be submitted for either formal oral presentation or for interactive presentation. Oral presentations require novel and complete research work supported by experimental results. Interactive presentations are expected to articulate emerging and future design, verification and test problems including work in progress and identify open problems that merit innovative future research. These presentations are given on a laptop in a face-to-face discussion area.

Submissions should not exceed 6 pages in length for oral-presentation papers and 4 pages in length for interactive-presentation papers. Submission of industry-oriented 2-page papers, limited to Topics in the A Track, will also be considered.

All papers should be formatted as close as possible to the final format: A4 or letter sheets, double column, single spaced, Times or equivalent font of minimum 10pt (templates are available on the DATE Web site for your convenience). To permit blind review, submissions should not include the author names. Any submission not in line with the above rules will be discarded.

All papers will be evaluated with regard to their suitability for the conference, originality and technical soundness. The Programme Committee reserves the right to reorient oral-presentation papers to interactive-presentation and vice versa, to obtain the most suitable presentation format. Submissions simultaneously under review or accepted by another conference, symposium or journal will be rejected. The DATE conference will work cooperatively with others to check for double-submissions. It is mandatory that authors of accepted presentations attend to present their work at the conference and also that each paper is accompanied by at least one full conference registration fee payment at the speaker rate.

SPECIAL SESSIONS

Special Sessions can take the form of **Panels** discussing visionary and/or controversial issues, **Hot-Topic Sessions**, dealing with the introduction and discussion of new R&D problems, and **Embedded Tutorial Sessions**, addressing trends in the technical domains that are of interest to the conference participants.

Special Session proposals consist of an extended summary of up to 1500 words describing the session content and format, and must be submitted via the Web site by Sept. 5, 2010.

Contributors of accepted special sessions will be asked to submit final texts or statements of panellists, as appropriate, for publication in the Proceedings (deadline Dec. 6, 2010). Panel sessions are entitled to one page in the Proceedings, whereas Embedded Tutorials and Hot Topic sessions are allocated a maximum of 6 pages per session. For more information, please contact:

Wolfgang Mueller
Tel: +49 5251 60 6134

wolfgang@acm.org
Fax: +49 5251 60 6065

Tom Fitzpatrick
Tel: +1 978 448 8797

tom_fitzpatrick@mentor.com
Fax: +1 978 448 8797

TUTORIALS

On the first day, half- and full-day technical tutorials on selected topics will be given by leading experts in their respective fields. The proposal should motivate the topic and its relevance for both academia and industry, describe the target audience (who? how many? match with typical DATE audience?), the reason for a tutorial, (why a tutorial, why now, why 0.5/1 day), tutorial objectives and a clear planning hereto (tutorial outline and speakers, what will be done to attract the audience). Proposals should be sent by Sept. 5, 2010 to:

Luca Fanucci
Tel: +39 050 2217 668

l.fanucci@iet.unipi.it
Fax: +39 050 2217 522

UNIVERSITY BOOTH

Universities and research institutes are invited to demonstrate their hardware platforms, prototypes tools and pre-commercial results. Demonstrations are presented at the Booth supported by electronic and other media. Outstanding demonstrations from R&D projects are welcomed. The University Booth is organised around technical topics to help the transfer of technology from research to industry. For more information, please contact, by Jan. 14, 2011, university-booth@date-conference.com.

Lorena Anghel
Tel: +33 4 76 57 46 96

lorena.anghel@imag.fr
Fax: +33 4 76 57 49 81

Volker Schoeber
Tel: +49 511 762 19688

schoeber@edacentrum.de
Fax: +49 511 762 19695

PHD FORUM

phd forum

The PhD Forum is a poster session hosted by the European Design and Automation Association (EDAA) and ACM SIGDA for PhD students to present and discuss their research work with people in the design automation and system design community. It represents a good opportunity for students to get feedback on their research and for the industry to see academic work in progress. Submissions should be sent by Nov. 12, 2010:

Peter Marwedel
Tel: +49 231 755 6111

peter.marwedel@tu-dortmund.de
Fax: +49 231 755 6116

EXHIBITION THEATRE

exhibition theatre

An open discussion forum in the midst of Europe's largest electronic system design exhibition. The programme combines expert panel sessions and customers' testimonials. The aim is to offer exhibition visitors a fresh view on the key industrial and business issues in the electronic systems design market. Submissions are invited from industry consortia, technology groups, standards bodies, or any person with opinions on future industry trends by Oct. 10, 2010:

Juergen Haase
Tel: +49 511 762 19698

haase@edacentrum.de
Fax: +49 511 762 19695

FRIDAY WORKSHOPS

friday workshops

Proposals for Friday Workshops on emerging research and application topics are invited. Particularly suitable topics are those not directly covered in the technical programme and which have the potential to impact on future DATE technical areas in design and test of microelectronic systems. For information and detailed descriptions on how to propose a workshop, please refer to the Web site. Proposals should be sent by Sept. 5, 2010 to:

Nicola Nicolici
Tel: +1 905 525 9140

nicola@ece.mcmaster.ca
Fax: +1 905 521 2922

FRINGE MEETINGS

fringe meetings

There are a limited number of rooms available for the organisation of fringe meetings (birds of a feather sessions) open to all DATE attendees, as well as for appropriate on-site closed meetings. Fringe Meetings may not run in parallel with conference sessions and may take place in lunch intervals or in the evening. Requests are considered in the order of their arrival, and should be directed to:

European Conferences
Tel: +44 203 502 8065

claire.cartwright@ec.u-net.com
Fax: +44 131 225 2925

Requests for commercial meetings will incur the standard room charges.

The 14th **DATE conference and exhibition** is the main European event bringing together designers and design automation users, researchers and vendors, as well as specialists in the hardware and software design, test and manufacturing of electronic circuits and systems. It puts strong emphasis on ICs/SoCs, reconfigurable hardware and embedded systems, including embedded software.

The five-day event consists of a **conference** with plenary invited papers, regular papers, panels, hot-topic sessions, tutorials and workshops, two special focus days and a track for executives. The scientific conference is complemented by a commercial **exhibition** showing the state-of-the-art in design and test tools, methodologies, IP and design services, reconfigurable and other hardware platforms, embedded software, and (industrial) design experiences from different application domains, e.g. automotive, wireless, telecom and multimedia applications. The organisation of user group meetings, fringe meetings, a university booth, a PhD forum, vendor presentations and social events offers a wide variety of extra opportunities to meet and exchange information on relevant issues for the design and test community. Special space will also be allocated for EU-funded projects to show their results.

THE CONFERENCE **the conference**

The **conference** addresses all aspects of research into technologies for electronic and (embedded) systems engineering. It covers the design process, test, and tools for design automation of electronic products ranging from integrated circuits to distributed large-scale systems. This includes both hardware and embedded software design issues. The conference scope also includes the elaboration of design requirements and new architectures for challenging application fields such as telecom, wireless communications, multimedia and automotive systems. Persons involved in innovative industrial designs are particularly encouraged to submit papers to foster the feedback from design to research. Panels, hot-topic sessions and embedded tutorials highlight and inform about emerging topics.

Special Days in the programme will focus on two areas bringing new challenges to the system design community:

Smart Devices of the Future: Future electronic systems will be dominated by the convergence between design (hardware and software) and fabrication to master next generation smart devices. The design of highly integrated and autonomous intelligent devices for healthcare, mobile and consumer applications require deep knowledge of technology characteristics to reach the required performance. Furthermore, hardware and software are being employed increasingly to overcome fabrication imperfection and to improve yield. This special day will focus on applications, key enabling technologies and future trends driving smart devices of the future.

Intelligent Energy Management – Supply and Utilisation: The links between the disciplines of computation, power electronics, and power systems must become stronger as we move into a world of increasing energy utilisation and efficiency. This special day will foster the necessary links between these separate disciplines through invited presentations from experts in the areas of energy generation, storage and utilisation. The day will also cover recent innovations in enabling technologies for portable devices (energy-harvesting and wireless powering) and applications of intelligent systems to improve the utilisation of electricity supply through smart metering and infrastructure.

On the first day of the DATE event, half- and full-day in-depth technical **tutorials** are given by leading experts in their respective fields. The tutorials are well suited for researchers, tool developers and system designers.

Friday Workshops concentrate on specialised and novel topics.

THE EXHIBITION **the exhibition**

The conference is complemented a large **exhibition** and unique networking opportunity for vendors of tools and services for hardware and embedded software for the design, development and test of Systems-on-Chip, IPs, Embedded Systems, ASICs, FPGAs and PCBs including a broad range of design reuse technologies and services.

To inform attendees on commercial and design related topics, there will be a full programme in the Exhibition Theatre which will combine presentations by exhibiting companies and selected conference special sessions.

TOPIC AREAS **topic areas for submission**

Within the scope of the conference, the main areas of interest are organised in the following tracks. Submissions can be made to any of the track topics. For detailed descriptions of the track topics, please refer to the DATE Web site.

Track D: Design Methods, Tools, Algorithms and Languages, addressing design automation and design tools for electronic and embedded systems. Emphasis is on methods and tools related to the use of computers in designing products. This includes designer feedback on existing design methods and tools as well as to initiate discussions on requirements of future system architectures, design flows and environments.

This track is organised in the following topics:

- D1 System Specification and Modelling
- D2 System Design, Synthesis and Optimisation
- D3 Simulation and Validation
- D4 Design of Low Power Systems
- D5 Power Estimation and Optimisation
- D6 Emerging Technologies, Systems and Applications
- D7 Formal Methods and Verification
- D8 Network on Chip
- D9 Architectural and Microarchitectural Design
- D10 Architectural and High-Level Synthesis
- D11 Reconfigurable Computing
- D12 Logic and Technology Dependent Synthesis for Deep-Submicron Circuits
- D13 Physical Design and Verification
- D14 Analogue and Mixed-Signal Systems and Circuits
- D17 Interconnect, EMC and Packaging Modelling

Track A: Application Design, is devoted to the presentation and discussion of design experiences with a high degree of industrial relevance, as well as innovative design methodologies and applications of specific design technologies in an industrial context. Contributions should illustrate state-of-the-art designs, which will provide viable solutions in tomorrow's silicon and embedded systems. Designs that achieve a specific record in terms of performance, power management or any other concrete advantage compared to the state-of-the-art for a given application domain should also be submitted to this track.

New this year in Track A is the opportunity to submit short, 2-page papers, offering the chance (primarily to industry) of pointing out to the community real-life design and technology challenges that should be addressed in the short –to-medium term.

This track is organised in the following topics:

A1 Computing Systems

A2 Communication, Consumer and Multimedia Systems

A3 Transportation Systems

A4 Medical and Healthcare Systems

A5 Energy Generation, Recovery and Management Systems

A6 Secure, Dependable and Adaptive Systems

Track T: Test Methods, Tools and Innovative Experiences, addressing design-oriented embedded test solutions as well as defect analysis, modelling, test generation and silicon debugging. Emphasis is on both system- and chip-level test.

This track is organised in the following topics:

T1 Test for Defects, Variability, and Reliability

T2 Test Generation, Simulation and Diagnosis

T3 Test for Mixed-Signal, Analogue, RF, MEMS

T4 Test Access, Design-for-Test, Test Compression, System Test

T5 On-Line Testing and Fault Tolerance

Track E: Embedded Systems Software is devoted to modelling, analysis, design and deployment of Embedded Software. Areas of interest include methods, tools, methodologies and development environments. Emphasis will also be on embedded software platforms, software integration, adaptive real-time systems, and dependable systems.

This track is organised in the following topics:

E1 Real-time, Networked, and Dependable Systems

E2 Compilers and Code Generation for Embedded Systems; Software-Centric System Design Exploration

E3 Model-based Design and Verification for Embedded Systems

E4 Embedded Software Architectures and Principles; Software for MPSoC, Multi/many-core and GPU-based Systems

In addition to the above conference tracks, we welcome proposals for **Special Sessions, Tutorials** and **Friday Workshops**, and submissions for the Special Days on **Smart Devices of the Future** and **Intelligent Energy Management – Supply and Utilisation**.

COMMITTEES committees

A full list of the executive and programme committee members is available on the DATE Web site.

SPONSORS sponsors

The event is sponsored by the European Design and Automation Association, the EDA Consortium, the IEEE Computer Society – TTTC, the IEEE Council on EDA, ECSI, ACM - SIGDA, and RAS. In cooperation with ACM – SIGBED, IEEE Solid-State Circuits Society (SSCS), IFIP and IET.

INFORMATION information

Event Secretariat

European Conferences
3 Coates Place
Edinburgh EH3 7AA, UK

Tel: +44 131 225 2892
Fax: +44 131 225 2925
sue.menzies@ec.u-net.com

General Chair

Bashir Al-Hashimi
University of Southampton, UK

bmah@ecs.soton.ac.uk

Programme Chair

Enrico Macii
Politecnico di Torino, Italy

enrico.macii@polito.it

To add your name to the mailing list go to the Web site:
www.date-conference.com