

AACD 2014

Instituto Superior Técnico

The Instituto Superior Técnico (IST), since its creation in 1911, is the largest and most reputed school of Engineering, Science and Technology and Architecture in Portugal. At IST, we aim to give our students and alumni the education and the knowledge tools to improve, to change and to shape society through science, technology, and entrepreneurship. We provide top quality higher education, strongly exposed to Research, Development and Innovation (RD&I) activities, immersing our students in an exciting and global environment geared towards solving the challenges of the XXIst Century.

The increasing globalization of training, research and innovation activities calls to the development of international networks and partnerships grouping science and technology schools worldwide to share the best practices in training, research and innovation and to offer their students a multinational and multicultural experience. As part of its strategic policy, IST is actively involved in several networks and international programmes to promote student mobility, both at undergraduate and postgraduate levels, as well as internships for participating in IST's research activities, such as CLUSTER, CESAER, TIME, ATHENS and MAGALHÃES-SMILE. Under these mobility programmes, IST celebrated different bilateral agreement with European and Non-European universities. In the framework of the ERASMUS programme, there are nearly 200 agreements. Through a large number of agreements with other institutions worldwide, IST participates in more than 20 Dual Master programmes, and joint PhD programmes with MIT, CMU, UT-Austin e EPFL.



AACD 2014

Scientific Committee:

Andrea Baschirotto - Univ. of Milan-Bicocca (Italy)
Kofi Makinwa - Univ. Delft (The Netherlands)
Pieter Harpe - Univ. Eindhoven (The Netherlands)

Organizing Committee:

Nuno Horta - Instituto Superior Tecnico (Lisbon)
Jorge Guilherme - Instituto Politecnico Tomar (Tomar)

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AACD Series web-site: www.aacd.ws
AACD2014 web-site: www.it.pt/aacd2014

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EURO-DOTS Program

PhD students can acquire 3ECTS credits and partial sponsorship from Eurodots when attending AACD. See details at www.eurodots.org.



AACD 2014

23rd Workshop on Advances in Analog Circuit Design

April 8 – 10, 2014
Lisbon, Portugal



www.eurodots.org

www.aacd.ws

www.it.pt/aacd2014

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About AACD2014:

AACD workshop is a highly qualified series of events established in 1992 and, since then, held once-per-year. In the past, the AACD workshop series has been organized in Scheveningen, Leuven, Eindhoven, Villach, Lausanne, Como, Copenhagen, Nice, Tegernsee, Noordwijk, Spa, Graz, Montreux, Limerick, Maastricht, Oostende, Pavia, Lund, Graz, Valkenburg and Grenoble.

The aim of the AACD workshop is to bring together a group of analog/RF circuit design experts, who are personally advancing the frontiers of analog circuit design, and to brainstorm on new possibilities and future developments. The workshop is held in places where a sufficient number of experts are available in the immediate neighborhood. Proceedings are available at the workshop. Afterwards a book containing the revised proceedings is edited and published.

The AACD 2014 workshop will take place on 8th–10th April 2014 at the Instituto Superior Técnico (Lisbon).

How to reach Lisbon:

By plain

Lisbon international airport (10 minutes drive from IST)

By train

International train to Lisbon, Oriente Station. Take the metro to Alameda station to reach IST.

Accommodation information:

Several hotel rooms have already been reserved for the AACD2014 participants at the following hotels in Lisbon.

Turim Alameda Hotel

Av. Rovisco Pais, 34

1000-046 Lisboa

Phone: +351.210.330.830

www.turimhoteis.com

Holiday Inn Lisboa

Avenida António José de Almeida, 28-A

1000-044 Lisboa

Phone: +351.21.0046046

www.holiday-inn.com/lisbonprt

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About Lisbon:

Lisbon is the capital of Portugal and lies on the north bank of the Tagus Estuary, on the European Atlantic coast. It is the westernmost city in continental Europe. Greater Lisbon has an area of approximately 1,000 km².

The city lies more or less in the centre of the country, approximately 300 km from the Algarve in the south and 400 km from the northern border with Spain.

Lisbon offers a wide variety of options to the visitor, including beaches, countryside, mountains and areas of historical interest only a few kilometers away from the city centre.



<u>RATES:</u>	Until March 23st, 2014	After March 23st, 2014
Standard	700€	775€
IEEE Member	630€	700€
Student	315€	350€

The registration includes tickets for Lunches, **Welcome Reception**, and **Gala Dinner**, as well as one copy of the **AACD 2014 Proceedings**.

Social events:

April 8th, 2014:
Welcome reception

April 9th, 2014:
Gala Dinner

AACD 2014 Final Program

April, 8th, 2014

High-Performance AD and DA Converters Chairman: Pieter Harpe

- **Joao Goes** (Univ. Nova de Lisbon - Portugal), "Techniques for Low-Power, High-Speed, High Effective-Resolution Pipeline ADCs in Deep Nanoscale CMOS"
- **Bob Verbruggen** (imec - Belgium), "Digitally Assisted Analog to Digital Converters"
- **Lukas Kull** (IBM Research - Zurich - Switzerland), "Energy-Efficient High-Speed SAR ADCs in CMOS"
- **Maurits Ortmanns** (Univ. of Ulm - Germany), "Automated Design of High-Speed Continuous-Time Sigma-Delta Modulators employing Compensation and Correction of Non-Idealities"
- **Pedro Figueiredo** (Synopsys - Portugal), "Recent Advances and Trends in High-Performance Embedded Data Converters"
- **Joost Briare** (IDT - Netherlands), "High-performance DACs: unifying 16-bit dynamic range with GS/s data-rates"

April, 9th, 2014

IC Design in Scaled Technologies Chairman: Andrea Baschiroto

- **Brent Beacham** (Synopsys - Canada), "Mixed-Signal IP Design Challenges in 20nm and Beyond"
- **Marcello De Matteis** (Univ. Milan Bicocca - Italy) "Continuous-Time Analog Filter Design in CMOS Nanoscale Era"
- **Patrick Quinn** (Xilinx - Ireland), "Silicon innovation exploiting Moore scaling and "More than Moore" technology"
- **Francesco Svelto** (Univ. Pavia - Italy) "On the design of circuits for frequency synthesizers at mm-waves in ultra-scaled CMOS"
- **M. Fulde** (Intel - Germany) "Digital Enhanced Transmitter Concepts for Nanometer-CMOS Technologies"
- **R. Pelliconi** (S3 - Ireland) "Design of a DC/DC controller IP in 28nm"

April, 10th, 2014

Time-Domain Signal Processing Chairman: Kofi Makinwa

- **Shingo Mandai, Edoardo Charbon** (TU Delft - Netherlands), "High Speed Time-domain Imaging"
- **Lukas Perktold, Jorgen Christiansen** (AMS - Austria, CERN - Switzerland), "High Resolution Time Measurements for High Energy Physics Experiments"
- **Wanghua Wu, Bogdan Staszewski** (TU Delft - The Netherlands), "Time-Domain Techniques for mm-Wave Frequency Generation"
- **Sachin Rao, Pavan Hanumolu** (Qualcomm - US, Oregon State Univ. - USA), "A Deterministic Background Calibration Technique for VCO-based ADCs"
- **Jelle van Rethy, Georges Gielen** (KU Leuven - Belgium), "Towards energy-efficient CMOS integrated sensor-to-digital interface circuits"
- **Benjamin Hershberg, Un-Ku Moon** (imec - Belgium, Oregon State Univ. - USA), "The Ring Amplifier: Scalable Amplification with Ring Oscillators"