AACD 2024

XXXII Workshop on Advances in Analogue Circuit and Design
University of Pavia
Pavia (Italy)

April, 9 – 11, 2024

https://www.mbtechnoservices.com/aacd24

The aim of the Workshop on Advances in Analog Circuit Design (AACD) is to bring together a large group of people working at the frontiers of analog circuit design, to study and discuss possibilities and future developments. The workshop lasts three days and runs yearly since 1992, covering every year three specific topics in the field on analog design (one topic per day). This year the 32nd edition of the AACD workshop will take place in Pavia, Italy, from April 9th to April 11th, 2024.

April, 9, 2024
High-Performance Audio
Chairman: Bram Nauta (University of Twente, The Netherlands)

- *Mikkel Høverby (Consultant, Denmark), "20 Years of Fully Integrated Class-D Audio"*
- *Pedro Amaral (Infineon, Austria), "High-Performance Capacitive MEMS-Based Microphones for Consumer Market Applications: Analog Design and System Considerations"*
- *Daniel Schinkel (Axign/Monolithic Power Systems, The Netherlands), "Mixed-Signal Amplifier Control"*
- *Enrico Oberti (Inventvm, Italy), "Ultra-Low Power Class-D Amplifiers for True Wireless Stereo (TWS) Applications"*
- *Huajun Zhang (TU Delft, The Netherlands), "Capacitively Coupled Class-D Audio Amplifiers"*
- *Marco Berkhout (Goodix, The Netherlands), "Smart Speaker Drivers"*

April, 10, 2024
Biomedical and Wearable Applications
Chairman: Kofi Makinwa (TU Delft, The Netherlands)

- *Giuseppe Bruno and Pasquale Biancolillo (STMicroelectronics, Italy), "Wearable Devices for Vital Sign Monitoring"*
- *Yun-Shiang Shu (MediaTek, Taiwan), "Biopotential Sensing in Consumer Wearables with Dry Electrodes"*
- *Jiawei Xu (Fudan University, China), "Multimodal Analog Front-End Circuits for Wearable Healthcare"*
- *Dante Muratore (TU Delft, The Netherlands), "Implantable Electronics for a High-Fidelity Artificial Retina"*
- *Nick van Helleputte (imec, Belgium), "Sensing Electro-Chemical Signals with CMOS"*
- *Drew Hall (University of California at San Diego, USA), "CMOS Chips for Single-Molecule Biosensing"*

April, 11, 2024
High-Voltage Analog
Chairman: Andrea Baschirotto (University of Milano-Bicocca, Italy)

- *Davide Giacomini (Infineon Technologies, Italy), "The Magic of High Voltage Technologies in the Development of Analog Integrated Circuits for Applications up to 1200 V"*
- *Jef Thone and Nick van Houtven (MindCet, Belgium), "Design Techniques for WBG Transistor Adoption in HV Power Conversion"*
- *Ruida Yun (Analog Devices, USA), "Introduction to High-Voltage Isolation Technology, from Process Development to Circuit Design"*
- *Stefen Heinen (RWTH Aachen University, Germany), "Smart High-Voltage Integrated Circuits"*
- *Bernhard Wicht (Hannover University, Germany), "Chip-Scale High-Voltage Power Supplies"*
- *Marco Grassi (University of Pavia, Italy), "High-Voltage SC DC-DC Converters for High-Efficiency at Light-Load Power Supplies"*

AACD is recognized as Ph. D. School. For Ph. D. Students that need a final exam for gaining ECTS, a test will be organized online a few weeks after the Workshop.

AACD 2024 Organization

Scientific Committee

Andrea Baschirotto – University of Milan-Bicocca (Italy)
Kofi Makinwa – TU Delft (The Netherlands)
Bram Nauta – University of Twente (The Netherlands)

Organizing Committee

Andrea Baschirotto –University of Milano-Bicocca (Italy)
Piero Malcovati – University of Pavia (Italy)

Local organizers

University of Pavia

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