

Frist Day, Thursday 3rd July

8 – 8:45	**Registration & Welcome**
8:30	Conference opening *Francesco Prudenzano, Politecnico d Bari, Italy* *Michele Magno, ETH Zürich, Switzerland*
8:45 – 10:30	**Session 1 – CHAIR: D. De Venuto**
8:45 – 9:15	**Keynote Speaker** *Jan Rabaey, University of California at Berkeley, USA* The "Compute Continuum" and its Energetics
9:15	Paper ID #11, WakeMod: A 6.9µW Ultra-Low Power Wake-Up Radio Module with -72.6dBm Sensitivity for On-Demand IoT *Silvano Cortesi, Lukas Schulthess and Michele Magno*
9:30	Paper ID #5, A Novel Current-Mode EMG Interface *Riccardo Olivieri, Gianluca Barile, Vincenzo Stornelli, Davide Ciarrocchi, Martina Fonte, Alessandro Zompanti and Giuseppe Ferri*
9:45	Paper ID #51, All-Fiber In-Line Mach-Zehnder Interferometer for High-Resolution Sensing *Francesco Anelli, Antonella Maria Loconsole and Francesco Prudenzano*
10:00 – 10:30	**Keynote Speaker** *Georges Gielen, Ku Leuven* Ultra-low-power circuit design for edge applications
10:30 – 11:00	**Coffee Break and Posters**
10:30 – 11:00	Poster Session 1
11:00 – 13:00	**Session 2 – CHAIR: G. Ferri**
11:00	Paper ID #7, AI Heart Sound Denoising at the Edge *Declan Duggan, Andriy Temko, Volodymyr Sarana, Andreea Factor and Emanuel Popovici*
11:15	Paper ID #12, Performance Prediction and Parameter Synthesis of OTFT Amplifiers Using Neural Networks *Boris Dabov, Marco Fattori, Eugenio Cantatore and Stijn Ringeling*
11:30	Paper ID #15, Simulation and Characterization of a Monolithic Active Pixel Sensor Designed for Brachytherapy *Thomas Corradino, Lucio Pancheri, Matteo Polo, Alberto Taffelli, Angelo Rivetti, Manuel Dionisio Da Rocha Rolo, Raffaele Aaron Giampaolo, Edoardo Bianco, Silvia Tedesco, Stefano Durando and Marco Petasecca*
11:45	Paper ID #38, Flexible electrochemical sensor for detecting chlorine ions in sweat *Nicola Lovecchio, Giulia Petrucci, Martina Baldini, Fabio Cappelli, Giampiero de Cesare, Francesca Costantini, Domenica De Venuto, Michele Chiarantoni and Daniela De Venuto*
12:00 – 12:30	**Keynote Speaker** *Roberto Maurino, Analog Devices* Capacitive Programmable Gain Amplifiers: A Sensor Interface for the AI Era
12:30	Paper ID #28, Sub-Millisecond Event-Based Eye Tracking on Resource-Constrained Microcontroller



	Marco Giordano, Pietro Bonazzi, Luca Benini and Michele Magno
12:45	Paper ID #17, Slot Waveguide Ring Resonators for Label-Free Detection of SARS-CoV-2 and RSV in the Near-Infrared Region *Annabella la Grasta, María Isabél Gómez-Gómez, Amadeu Griol, Estefanía Gómez, Martino De Carlo, Raffaella Germinario, Teresa Natale, Vittorio M. N. Passaro, Alejandro Martínez and Francesco Dell'Olio*
13:00 – 14:30	LUNCH BREAK
14:30 – 15:30	Session 3 – CHAIR: D. Caputo
14:30 – 15:00	**Keynote Speaker** *Edoardo Charbon, Advanced Quantum Architecture Lab* Quantum Computing/Sensing: Are Cryo-CMOS Circuits Essential?
15:00	Paper ID #13, Nanocarbon Conductive Ink from Food Waste for Printed Resistive Loads *Giulia Coco, Valerio Galli, Pietro Rossi, João P. Vita Damasceno, Valerio Francesco Annese and Mario Caironi*
15:15	Paper ID #30, Practical and Inexpensive Evanescent-Wave Sensing Platform for Methylene Blue Detection in Water *Alessio Buzzin, Ahmadreza Alaeddini, Nicolas Hanine and Rita Asquini*
15:30 – 17:00	Coffee Break and Posters
15:30 – 17:00	Poster Session 2 Demo Session 1
17:00 – 20:00	Social Event in Monte Sant'Angelo, Basilica S. Michele (UNESCO)
20:30	GALA DINNER

Second Day, Friday 4th July

9:15 – 10:30	Session 4 – CHAIR: M. Magno
9:15 – 10:00	**Keynote Speaker** *Alberto Sangiovanni Vincentelli, University of California at Berkeley, USA* AI for chip design: Hype or Reality?
10:00	Paper ID #50, ListenToJESD204B: A Lightweight Open-Source JESD204B IP Core for FPGA-Based Ultrasound Acquisition systems *Soumyo Bhattacharjee, Federico Villani, Andrea Cossettini, Christian Vogt and Luca Benini*
10:15	Paper ID #16, Real-Time Management of Microbial Electrolysis Cells for Energy-Efficient Wastewater Treatment *Lukey Clark, Domenico Balsamo and Elizabeth Heidrich*
10:30 – 11:15	Coffee Break and Posters
10:30 – 11:15	Poster Session 3
11:15 – 13:00	Session 5 – CHAIR: G. De Cesare



11:15 – 11:45	**Keynote Speaker** *Chris Van Hoof, KU Leuven, Belgium* Technology for Agriculture 5.0, Food 5.0 and Health 5.0
11:45	Paper ID #21, AniTrack: A Power-Efficient, Time-Slotted and Robust UWB Localization System for Animal Tracking in a Controlled Setting *Victor Luder, Lukas Schulthess, Silvano Cortesi, Leyla Rivero Davis and Michele Magno*
12:00	Paper ID #47, Comparative Assessment of Adaptive Data Rate Algorithms for LoRaWAN IoT Applications *Mattia Pirri, Alessio Pirri, Luca Leonardi, Lucia Lo Bello and Gaetano Patti*
12:15 – 13:00	**Keynote Speaker** Luca Benini, Università of Bologna, Italy and ETH Zürich, Switzerland Toward End-to-End Open Platforms for the Embodied AI Era
13:00 – 14:30	LUNCH BREAK
14:30 – 16:00	Session 6 – CHAIR: D. Caputo
14:30 – 15:00	**Keynote Speaker** *Andrei Vladimirescu, University of California, Berkeley, USA and Delft University* Quantum Computing: Is it for Real?
15:00	Paper ID #48, Resistive MPGD-based HCAL for future colliders *Muhammad Ali, Anna Stamerra and Rosamaria Venditti*
15:15	Paper ID #14, A Format and Protocol for Machine-to-Machine OWL Data Streams *Michele Ruta, Floriano Scioscia, Valerio Di Ceglie, Ivano Bilenchi, Filippo Gramegna and Eugenio Di Sciascio*
15:30	Paper ID #27, TCAD Simulations and Measurements of a-Si:H devices for particle detection *Daniele Passeri, Arianna Morozzi, Leonello Servoli, Mauro Menichelli, Maddalena Pedio, Domenico Caputo, Nicola Lovecchio, Giampiero De Cesare and Marco Petasecca*
16:00 – 16:30	Conference closing and Awards *Daniela De Venuto, Politecnico di Bari, Italy*
16:30 – 19:30	Social Event - Manfredonia