

**Emerging technologies and applications – the elephants in the technology room  
Thursday, April 20, 2023**

**8:15 Welcome (Giovanni De Micheli, EPFL and Marco Casale-Rossi, Synopsys)**

**The future of free technical exchange (Chair: Giovanni De Micheli, EPFL)**

**8:45 - 9:30 Keynote: Joachim Kunkel, Synopsys:** The changing landscape of the semiconductor industry

**9:30-10.00 Open Discussion**

**10:00 – 10:30 Coffee break**

**Quantum Computing (Chair: Giovanni De Micheli, EPFL)**

**10:30 - 11:15 Keynote: Jason Cong, UCLA:** Layout Synthesis and Architecture Customization for Quantum Computing

**11:15 – 12:30 Panel. How will QC be designed? Chair: Robert Wille, T.U. Munich**

Panelists:

Luca Amaru, Synopsys

Edoardo Charbon, EPFL

Thomas Haener, Amazon

Mathias Soeken, Microsoft

Andrei Vladimirescu, U.C. Berkeley

**12:30 – 14:00 Lunch**

**Safety, security, privacy (Chair: Marco Casale-Rossi, Synopsys)**

**14:00 – 14:45 Keynote: Mike Borza, Synopsys:** Having Our Cake and Eating It Too: Are Safety, Security and Privacy Possible Simultaneously?

**14:45 – 15:30 Keynote: Ingrid Verbauwede, KU Leuven:** Hardware: an essential partner to cryptography

**15:30 – 16:00 Coffee Break**

**16:00 – 17:15 Panel: Will information security be a reality for everyone? Chair: Wayne Burleson, U.M. Amherst**

Panelists:

Lejla Batina, Radboud University

Rajesh Gupta, U.C. San Diego

Farinaz Koushanfar, U.C. San Diego

Alena Simalatsar, HES-SO, Sion

Yankin Tanurhan, Synopsys

Marilyn Wolf, U.N. Lincoln

**19:00 -- 20:00 Cocktail**

**20:00 – 23:00 Dinner**

**22:00 – 22:30 Dinner Keynote: Patrick Groeneveld, Cerebras:** Sustainable innovation: Are we not fooling ourselves?

**Emerging technologies and applications – the elephants in the technology room  
Friday, April 21, 2023**

**The metaverse of things: the future of IoT in a global context (Chair Marco Casale-Rossi)**

**8:30 – 9:15 Keynote: Jan Rabaey, UC Berkeley:** The Mirror World – The Land between the Meta- and the Omniverse

**9:15 – 10:00 Keynote: Alessandro Cremonesi, STMicroelectronics:** The *beauty* of being the "Enabler of the Future"

**10:00 – 10:30 Coffee break**

**10:30 – 11:45 Panel: Humans vs. things on the metaverse. Chair: Jamil Kawa, Synopsys**

Panelists:

David Atienza, EPFL

Joseph Friedman, U.T. Austin

Victor Grimblatt, Synopsys

Jan Rabaey, U.C. Berkeley

Tajana Simunic, U.C. San Diego

**11:45 – 12:30 Keynote: Tibor Meray, Boston Consulting Group:** How the Metaverse will Remake your Strategy.

**12:30 – 14:00 Lunch**

**Technology of the 30s (Chair Giovanni De Micheli)**

**14:00 – 14:45 Keynote: Raul Camposano, Silvaco –** TCAD Digital Twins for semiconductor manufacturing

**14:45 – 15:30 Keynote: Subhasish Mitra, Stanford University –** The Future of Hardware Technologies for computing

**15:30 – 16:00 Coffee Break**

**16:00 – 17:15 Panel: Is In-Memory computing a niche area or the main hardware platform for AI/ML? Chair: Luca Benini, ETHZ**

Panelists:

Pierre-Emmanuel Gaillardon, University of Utah

Patrick Groeneweld, Cerebras

Daniele Ielmini, Politecnico di Milano

Shahar Kvatinsky, Technion

Amrita Mathuria, Kepler Computing

Abu Sebastian, IBM Research, Zurich