



11th INTERNATIONAL WORKSHOP ON CHARACTERIZATION AND MODELING OF MEMORY DEVICES

October 6th – 7th 2022

Politecnico di Milano, Room Rogers - Via Ampère 2, Milano, Italy

PROGRAM

October 6th 2022

OPENING SESSION

9.30 Registration

10.10 Welcome

1st session: Memory device physics and material science

10.30 Plenary Talk - Atomistic simulations aiding nano-(opto)electronics

Elisa Molinari, Università di Modena

11.15 Phase-change heterostructures for neuromorphic computing

Riccardo Mazzarello, Università La Sapienza, Roma

11.50 The role of density in melt-quenching phase change materials

Martin Salinga, Muenster University

12.25 Lunch

2nd session: AI and Memory systems

14.15 Plenary Talk - Memory challenges and opportunities for AI at the extreme edge

Luca Benini, Università di Bologna & ETH

14.50 Emerging NVM-based concepts of Edge AI

Elisa Vianello, LETI

15.25 TinyML system with ultra-low power Memories

Iakovos Stamoulis, Think Silicon

16.00 Accelerating deep learning with in-memory computing, a system perspective

Giuseppe Desoli, STMicroelectronics

16.35 Coffee Break

October 7th 2022

3rd session: Plenary Talks

9.00 Memory technologies tailoring various products

Fabio Disegni, STMicroelectronics

9.45 Evolving Opportunities and Challenges for Memory

Mark Helm, Micron

10.30 Coffee Break

4th session: Material science & IMC

11.00 Ge-rich GexSbyTez alloys and high Ge content heterostructures for automotive applications

Raffaella Calarco, CNR Roma

11.35 Will hafnium oxide finally enable competitive ferroelectric devices?

Thomas Micolajick, NamLab

12.10 Deep learning inference using computational phase-change memory

Manuel Le Gallo, IBM Zurich

12.45 Lunch

14.00 Adjourn

More info available on the workshop website at www.iwcm2.eu

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