11th INTERNATIONAL WORKSHOP ON CHARACTERIZATION AND MODELING OF MEMORY DEVICES

October 6th – 7th, 2022
Politecnico di Milano, Aula Magna - Piazza Leonardo da Vinci 32, Milano

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, An Applied Materials Company

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

16.35  Coffee Break

October 7th, 2022

3rd session: Memory Applications

9.00  Evolving Opportunities and Challenges for Memory
        Mark Helm, Micron

9.45  16MB ePCM microcell for automotive grade microcontroller in 28nm FD SOI, featuring extension to 24MB for Over The Air software update
        Fabio Disegni, STMicroelectronics

10.20  Deep learning inference using computational phase-change memory
        Manuel Le Gallo, IBM Zurich

10.55  Coffee Break

4th session: Material science

11.30  Ge-rich GexSbyTez alloys and high Ge content heterostructures for automotive applications
        Raffaella Calarco, CNR Roma

12.05  Will hafnium oxide finally enable competitive ferroelectric devices?
        Johannes Ocker, Ferroelectric Memory Company

12.45  Lunch

14.00  Adjourn

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

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