



12th international workshop on

# CHARACTERIZATION AND MODELING OF MEMORY DEVICES

5-6 OCTOBER 2023

The workshop will take place at the University of Milano-Bicocca, Building U6, Piazza dell'Ateneo Nuovo 1, Milano, in the Room U6-4 "Aula Martini" floor -1.

## PROGRAM

### 5<sup>th</sup> October

09.30

Registration

10.15

Welcome

#### 1<sup>st</sup> Session

10.30

Plenary talk: **Antonino Conte**, STMicroelectronics, Italy  
*An 18nm ePCM NVM IP design for advanced microcontroller applications*

11.15

Plenary talk: **Arnaud Furnemont**, IMEC, Belgium  
*Memory opportunities in times of slow cost/bit scaling and fast compute efficiency improvement*

12.00

**Cristian Zambelli**, University of Ferrara, Italy  
*Improving Solid State Drives Performance/Reliability: a cross layer approach*

12.35

Lunch

#### 2<sup>nd</sup> Session

14.00

**Gabriel Molas**, Weebit Nano Ltd, Grenoble, France  
*From Initial Concept to Market Adoption: Challenges and Outlook for Resistive Memories*

14.35

**Erika Covi**, NaMLab, Dresden, Germany  
*Advancing Cognitive Systems: Harnessing the Power of Memristive Technology in CMOS Circuit Design*

15.10

**Konstantinos Konstantinou**, Tampere University, Tampere, Finland  
*The quest for defects in phase-change memory materials: structural and electronic aspects*

15.45

**Melika Payvand**, University of Zurich and ETH Zurich, Switzerland  
*Structure-function duality in memristive intelligent systems*

16.20

Coffee break

### 6<sup>th</sup> October

#### 3<sup>rd</sup> Session

9.30

Plenary talk: **Alessandro Curioni**, IBM Zurich, Switzerland  
*What's next in Computing: In-memory computing for next generation AI acceleration*

10.15

Plenary talk: **Emanuele Confalonieri**, Micron Technology, USA  
*The Rise of Memory Centric Computing Platforms*

11.00

Coffe break

11.30

**Kevin Garello**, Spintec CEA, France  
*Spintronics : a solution for the future of embedded systems?*

12.05

**Carlo Ricciardi**, Politecnico di Torino, Italy  
*Self-organized nanowire networks for neuromorphic computing and memory encoding*

12.35

**Petar Radojkovic**, Barcelona Supercomputing Center, Spain  
*O(n) Key-value Sort with Active Compute Memory*

13.10

Lunch

More info available on the workshop website at [www.iwcm2.eu](http://www.iwcm2.eu)

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