

International Workshop on “Emerging non-volatile memories”



Friday, July 31st, 2009 - 9.00a.m.-4.30 p.m.
INFN/CNR, Genova, Italy

Chair: Prof. Paolo Lugli, Institute for Nanoelectronics, Technische Universität München, Germany

The Workshop aims at providing an overview of the state of the art in the field of non volatile memories, touching on the various technologies which have been proposed in the last years. Contributions from industries, universities, and research laboratories will critically discuss their advances, open problems, perspectives and market outlook. Reports will be also presented on the activity carried out within various European projects dedicated to non-volatile memories (e.g. CHEMAPH, EMMA and VERSATILE). The workshop is free of charge. Coffee and lunch will be provided. For further information, please contact nano@ei.tum.de .

PRELIMINARY PROGRAM

- 9.00 **Non-Volatile Memories: An Overview**
Agostino Pirovano (Numonyx, Italy)
- 10.30 **Charge-trap memories**
Luca Perniola (CEA-LETI, France)
- 11.00 **NEMS-based memory devices**
Hiroshi Mizuta (Uni. Southampton, UK)
- 11.30 **Single molecule memories**
Heike Riel (IBM Research, Switzerland)
- 12.00 *Lunch break*
- 13.00 **Resistive Non-Volatile Memories**
Damien Deleruyelle (IM2NP Toulon, France)
- 13.30 **Redox-Based Resistive Switching Effects**
Rainer Waser (RWTH Aachen, Germany)
- 14.00 **Quantum-dot based memories**
Sidhu Maikap (Chang Gung University, Taiwan)
- 14.30 *Coffee Break*
- 15.00 **Overview of the VERSATILE Project**
Grazia Tallarida (MDM Lab, Italy)
- 15.30 **CHEmical vapor deposition of chalcogenide MAterials for PHase change memories - CHEMAPH**
Claudia Wiemer (MDM, Italy)
- 16.00 **Understanding reliability and scaling of phase-change memory devices**
Daniele Ielmini (Politecnico Milano, Italy)
- 16.30 *End of the Workshop*

Sponsored by the European Project Versatile



<http://www.mdm.infim.it/Versatile>

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