

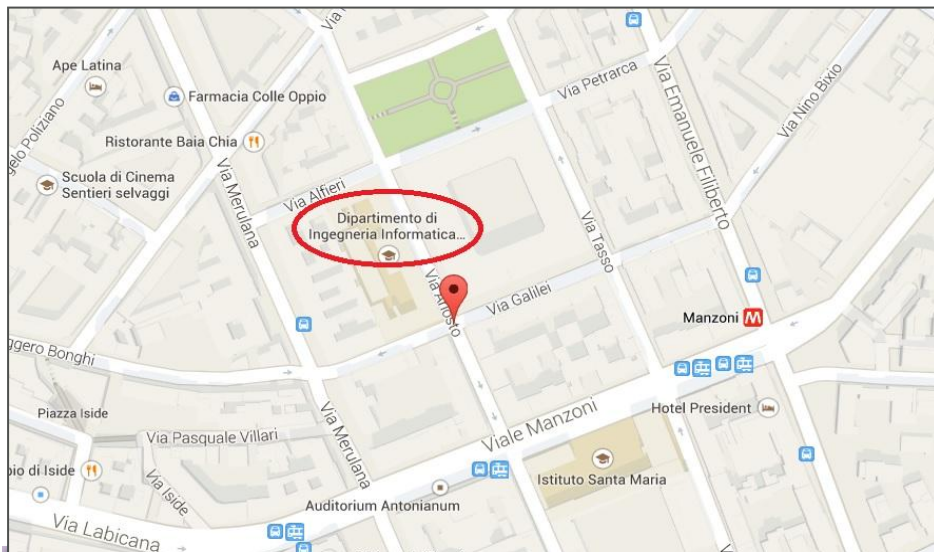


SAPIENZA
UNIVERSITÀ DI ROMA

January 29-30, 2015

Aula Magna della Facoltà di Ingegneria dell'Informazione,
Informatica e Statistica

Via Ariosto, 25 - Roma



**4th Micro and Nano-Electronics 2DAYS:
Non-Volatile Memories: State of Art in Europe**

ORGANIZER:
Sapienza Università di Roma,
Dipartimento di Ingegneria dell'Informazione,
Elettronica e delle Telecomunicazioni

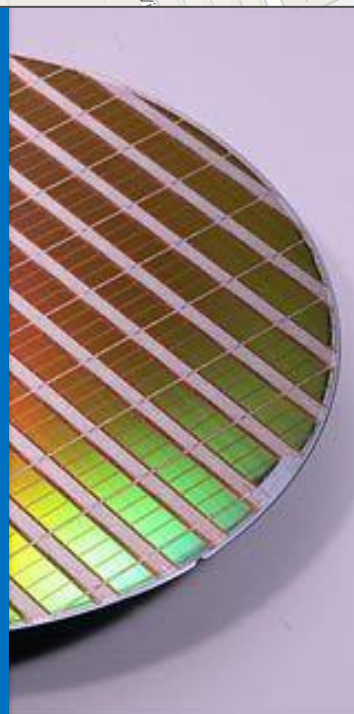
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The attendance is free

How to reach the place: Metro A, Stop Manzoni



4th Micro and Nano-Electronics 2DAYS4th Micro and Nano-Electronics 2DAYS

January 29

Non-Volatile Memories: State of Art in Europe

This is the fourth edition of the Workshop "*Micro and NanoElectronics 2Days*", whose mission is gathering industries and researchers active in specific fields of the semiconductor world. This year the workshop focuses on the topic of the non-volatile memories. The state of art of research in Italy and Europe, the industry current leading products and the development perspectives and strategies of the sector will be presented. The workshop originates from the collaboration between the research group on semiconductors of the *MiND Lab of the Rome Sapienza University* and the industry *Micron*, world leader of the non-volatile memory market.

14:00 **Welcome****The Industry side**

- 14:30 *Maurizio Peri*, ST Microelectronics
 14:50 *Massimo Atti*, INFINEON Padova
 15:10 *Juergen Lohmueller*, Robert BOSCH GmbH, Stuttgart
 15:30 *Cristiano Molina*, MAGNETI MARELLI
 15:50 *Hugues Raynal*, CONTINENTAL

COFFEE BREAK**Research in Europe**

- 16:50 *E. Miranda*, Universitat Autònoma de Barcelona, Spain "Non-linear memristive equations for resistive switching devices"
 17:10 *C. Wenger*, IHP Frankfurt/Oder, Germany "Current Status of Integrated HfO₂-based 1T1R Devices"
 17:30 *J. Van Houdt*, IMEC Leuven, Belgium "From 2D to 3D memory: a paradigm shift"
 17:50 *L. Perniola*, CEA-LETI MINATEC Campus Grenoble, France "eNVM at LETI : chain of value for disruptive concepts to accelerate the industrialization "

January 30

*Non-Volatile Memories: State of Art in Europe*09:00 **Welcome****MICRON Side**

- 09:30 *C. Villa*, R&D, "Challenges and opportunities in emerging memory design"
 09:50 *R. Bez*, R&D, "Challenges and opportunities in emerging memory design"
 10:10 *T. Vali*, NVM Design Center, "High Density NAND memory design"
 10:30 *A. Mondello*, NVM Design Center, "Secure Flash NOR with trusted computing capabilities"

COFFEE BREAK**Research in Italy**

- 11:30 *F. Crupi*, DIMES-Università della Calabria, "DC and low-frequency noise behavior of the conductive filament in bipolar HfO₂-based resistive RAM"
 11:50 *P. Pavan*, Università di Modena e Reggio Emilia «I-V and RTN characterization for a complete compact model of Hf-based RRAM"
 12:10 *P. Lorenzi*, DIET-Sapienza Università di Roma
 12:30 *D. Ielmini*, DEIB-Politecnico di Milano, «Oxide resistive memories: scaling and new applications in computing"
 12:50 *C. Zambelli*, Università di Ferrara, "Solid State Drives reliability: physical and architectural challenges".

LUNCH

- 14:30 **Open discussion (Moderator: Prof. Luca Selmi, Univ. di Udine)**
The semiconductor market: perspectives and industrial strategies
Andreas Wild, ENIAC JU
Giorgio Chiozzi, R&D INFINEON Padova
Giorgio Scuro, MICRON automotive
Sergio Galbiati, LFoundry