

<u>Mini-Colloquium about "Nanofabrication using focused electron and ions beams"</u> <u>in the "Condensed Matter in Paris" conference, 25th-26th August 2014</u>

Condensed Matter in Paris 2014 (http://cmd25jmc14.sciencesconf.org/) is an international conference covering all aspects of condensed matter physics. In the framework of this large conference, supported by the European Physical Society, a Mini-colloquium will be organized entitled "Nanofabrication using focused electron and ions beams".

Focused Electron and Ions Beams are used for high-resolution imaging and nanofabrication. In this Mini-Colloquium, the latest advances of their use for nanofabrication will be reviewed. The content of the contributions will focus on the description of novel theoretical and experimental results, covering basic physical phenomena as well as applications. The main topics of this event will be:

- Patterning by Focused Ion Beam
- Focused beam induced deposition and etching
- Growth of functional materials (magnetic, photonic, superconducting,...) by Focused beam induced deposition
- Purity of nanostructures grown by Focused beam induced deposition
- New sensing and biosensing concepts based on the use of Focused Beams
- Nanomanipulation inside FIB-SEM

The Keynote invited speakers of the Mini-colloquium are: Loïc Auvray (University Paris Diderot-CNRS, France), Christelle Prinz (Lund University, Sweden), Alexandra Mougin (University of Orsay, France), Rosa Córdoba (TU/e Eindhoven, The Netherlands), Heinz D. Wanzenboeck (TU Vienna, Austria).

The Organizers of the Mini-colloquium are José María De Teresa, ICMA, CSIC-University of Zaragoza, Spain, and Jacques Gierak, LPN-CNRS, Marcoussis, France.

The following sponsors of the Mini-Colloquium are acknowledged: FEI, ZEISS, RAITH-VISTEC. There will be presentations of these companies on the latest equipment available for *Nanofabrication using Focused Electron and Ions Beams*.



200 nm-diameter cobalt nanosphere grown by Focused Electron Beam Induced Deposition on the tip of a cantilever for studies of Ferromagnetic Resonance Force Microscopy. H. Lavenant et al., Nanofabrication (2014) in press.