







## NIS colloquium

# X-ray induced modifications in materials: applications and challenges

6-7 April 2017 Università di Torino, Via P. Giuria 1

April 6<sup>th</sup>, Aula A

Chair: Sergei Simak, Linköping University

14.00-14.10

**Ermanno Vercellin** 

Deputy Director for Research of the Physics Department of the University of Torino

Welcome address

14.10-14.20

#### **Gabriele Ricchiardi**

Director of Inter-departmental Centre for Nanostructured Interfaces and Surfaces - NIS - of the University of Torino

#### Welcome address

14.20-14.50

#### **Roelof Van Silfhout**

BM26-DUBBLE, European Synchrotron Radiation Facility, Grenoble

X-ray beam induced phase transitions at DUBBLE - observations at a bending magnet beamline

14.50-15.20

#### Nikita Medvedev

Institute of Physics of the Czech Academy of Sciences, Prague

Thermal and non-thermal transitions in X-ray-irradiated solids

15.20-15.50

#### **Gema Marinez-Criado**

Materials Science Institute, CSIC, Madrid

High resolution X-ray spectro-microscopy techniques applied to nanoscience









15.50-16.20

#### Krywka Christina

Helmholtz-Zentrum Geesthacht @ Desy, Hamburg

#### P03 Nanofocus Endstation - Nanodiffraction for Materials Science

16.20-16.40: Coffe Break

Chair: Angelo Agostino, University of Torino

16.40-17.10

**Petre Badica** 

National Institute of Materials Physics, Magurele

#### Materials research at National Institute of Materials Physics

17.10-17.40

Christoph Bäumer

Peter Grünberg Institute, Research Centre Jülich.

# Redox-based switching mechanisms in memristive devices studied by synchrotron-based spectromicroscopy

17.40-18.10

Sergei Simak

Linköping University

# Oxygen vacancy diffusion from ab initio non-equilibrium molecular dynamics

# April 7<sup>th</sup>, Sala Wataghin

Chair: Gema Martinez-Criado, CSIC, Madrid

9.00-9.30

**Andreas Johannes** 

ID13, European Synchrotron Radiation Facility, Grenoble

### Synchrotron based nano-focused X-ray investigations

9.30-10.00

**Lorenzo Mino** 

University of Torino

### **Direct-write X-ray nanopatterning for oxides**

10.00-10.30

**Ulf Lundström** 

Excillum, Stockholm

MetalJet X-ray sources for high intensity X-ray beams









10.30-11.00 **Lutz Bruegemann** *Bruker* 

# **Utilisation of the MetalJet X-ray source for diffraction experiments**

Organizers: Angelo Agostino Lorenzo Mino Marco Truccato

# Registration is free but requested

Please send an e-mail to: lorenzo.mino@unito.it by 31/03/2017