

**Workshop on X-ray Free Electron Lasers and their Applications,  
June 18<sup>th</sup>-19<sup>th</sup>, 2010, NCSR "Democritos", Athens, Greece**

Dear colleague,

The workshop on X-ray Free Electron Lasers and their Applications is organized by the BE/OPT-XFEL<sup>#</sup> Network, a Greek initiative aiming to adequately prepare the Greek scientific community for the unprecedented research opportunities created by X-ray lasers and in particular by the European XFEL facility (<http://www.xfel.eu/research/possibilities/>).

Currently, approximately 70 Greek scientists have expressed their interest for XFEL applications in Physics, Chemistry, Biology and Materials Sciences. A feasibility study recently prepared by the BE/OPT-XFEL Network comes to the conclusion that the XFEL technology will be very beneficial to a large number of scientific fields which are highly relevant to the Greek scientific community.

In the framework of the BE/OPT-XFEL activities, we invite you to a workshop on X-ray Free Electron Lasers and their Applications which will be organized on June 18<sup>th</sup>-19<sup>th</sup>, 2010 at the NCSR "Democritos", Athens, Greece. The local organizers are the NCSR "Democritos", the National Research Foundation and the Agricultural University of Athens.

The invited speakers are XFEL experts from Europe, USA and Japan. Presentations will mainly cover basic principles of XFEL operations and scientific applications in a wide range of fields that were inaccessible prior to XFEL. The workshop will close with a round-table discussion.

By the end of May 2010 you will receive the final program of the workshop. Until then, please note the above date and encourage your collaborators to participate.

Participation is free for all attendants.

The invited speakers include:

**Massimo Altarelli**, Chairman of the European XFEL Management Board, European XFEL GmbH, Germany  
(*The European X-ray Free-Electron Laser in Hamburg*)

**Henri Bachau**, Université Bordeaux, France  
(*Non-linear processes in simple atoms and molecules interacting with vuv and xuv short laser pulses*)

**Loren Beitra**, London Centre for Nanotechnology, University College London, UK (Prof. I. Robinson's lab)  
(*Coherent x-ray diffraction imaging of Au nanocrystals in order to reveal strain and crystallographic defects*)

**Majed Chergui**, École Polytechnique Fédérale, Lausanne, Switzerland  
(*Optical and X-ray studies of the ultrafast molecular dynamics in solutions*)

**Stefan Eisebitt**, Technische Universität Berlin, Berlin, Germany  
(*Material Sciences, to be announced*)

**Luca Perfetti**, Ecole Polytechnique Palaiseau. Paris, France  
(*Time resolved photoemission of highly correlated materials*)

**Joachim Pflüger**, DESY/HASYLAB-Hamburg, Germany  
(*Undulator systems for the European XFEL and potential developments for Laser driven accelerators*)

**Aymeric Robert**, Linac Coherent Light Source, SLAC National Accelerator Laboratory, Stanford, USA  
(*Material Sciences, to be announced*)

**Johen Schneider**, DESY/Hamburg. Center for Free-Electron Laser Science CFEL, Germany  
(*The Linac Coherent Light Source at SLAC: Facility and early science*)

**Changyong Song**, RIKEN SPring-8 Center/Harima Institute, Japan  
(*Diffraction Imaging of Biological Specimens with Intense, Coherent X-rays*)

**Josef Tiggesbäumker**, Universität Rostock, Rostock, Germany  
(*Current FEL experiments and possible applications with the X-FEL, in particular with respect to nanoparticles and clusters*)

**Thomas Tschentscher**, Member of the European XFEL Management Board, European XFEL, Germany.  
(*European XFEL scientific applications and the related instrumentation*)

**Edgar Weckert**, Member of the Scientific Advisory Committee of the European XFEL, DESY/Hamburg, Germany.  
(*XFEL application in Structural Biology*).

For the local organizers,

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