

XFEL Science: From current Highlights to future Capabilities

Annual meeting of the GDRi XFEL-Science

11 – 12 December 2017

Monday, 11 December 2017: **Moissan Auditorium of the ENSCP**
 Campus Curie, 11 Rue Pierre et Marie Curie, 75005 Paris

9:30 – 10:00 Registration and Coffee

Workshop Introduction

10:00 – 10:10 *Welcome and Introduction*
Jan Luning (XFEL-Science coordinator / LCPMR, Paris)

Session I

10:10 – 10:55 *European XFEL: First Experiments and Next Steps towards Full Operation*
Michael Meyer (European XFEL, Hamburg)

Session II Instrumentation Projects

10:55 – 11:10 *XFEL Science and the point of view of the INP@CNRS*
Emmanuelle Lacaze (INP@CNRS, Paris)

11:10 – 12:30 *Presentation and Discussion of Instrumentation Projects in France*
Workshop participants

12:30 – 14:00 *Poster Session & Buffet Lunch*

Session III

14:00 – 14:45 *FLASH: Current Highlights and Upcoming Developments*
Elke Ploenjes-Palm (DESY, Hamburg)

14:45 – 15:10 *Time-resolved serial crystallography at XFELs to watch proteins at work*
Martin Weik (IBS, Grenoble)

15:10 – 15:35 *Structural and spectroscopic studies of Photosystem II and model complexes at XFELs*
Benedikt Lassalle (Synchrotron SOLEIL, Gif-sur-Yvette)

15:35 – 16:00 Coffee Break

Session IV

16:00 – 16:45 *Frontier Research at FERMI and Upcoming Developments*
Filippo Bencivenga (FERMI@ELETTRA, Trieste)

16:45 – 17:05 *X-ray switching with visible transient grating*
Valentin Besse (Université du Maine, Le Mans)

17:05 – 17:30 *Ultrafast evolution and transient phases of a prototype out-of-equilibrium Mott–Hubbard material*
Niloufar Nilforoushan (LPS, Orsay)

Session V GDRi XFEL-Science

17:30 – 19:00 *Annual plenary meeting of the GDRi XFEL-Science*

19:30 *Dinner*

Tuesday, 12 December 2017 **CHARPAK Auditorium of the UPMC**
Campus Jussieu, 4 Place Jussieu

8:45 – 9:00 Registration and Coffee

Session VI

9:00 – 9:25 *Probing dynamics with X-ray scattering and absorption*

Marco Cammarata (Institut de Physique de Rennes, Rennes)

9:25 – 9:50 *Fast & Ferrous: Understanding the emergence of functions in photoactive molecular materials by decoupling electronic and structural dynamics*

Eric Collet (Institut de Physique de Rennes, Rennes)

9:50 – 10:10 *Dynamical fluctuations at Sn adatoms on the prototypical Ge(111)R3xR3 surface: CELIA and FLASH experiments*

Guy Le Lay (PIIM, Marseille)

10:10 – 10:40 *Coffee break*

Session VII

10:40 – 11:05 *Highlights from recent femtosecond pump-probe gas-phase experiments at LCLS, SACLA, FLASH and FERMI*

Marc Simon (LCPMR, Paris)

11:05 – 11:30 *Photochemical reaction dynamics of Ru₃(CO)₁₂ studied by picosecond and femtosecond X-ray solution scattering at ESRF and LCLS*

Qingyu Kong (Synchrotron SOLEIL, Gif-sur-Yvette)

11:30 – 11:55 *Towards experimental photoinduced dynamics within isolated proteins and DNA strands*

Jean-Christophe Poully (CIMAP, Caen)

12:00 – 13:45 *Lunch & Coffee*

Session VIII

13:45 – 14:10 *fs-XANES to unravel the phase transition dynamics from solid to warm dense matter*

Noémie Jourdain (CELIA, Bordeaux)

14:10 – 14:35 *Probing Ultrafast Magnetization Dynamics with fs-short X-ray Pulses*

Boris Vodungbo (LCPMR, Paris)

14:35 – 15:00 *Concluding Discussion and Workshop Closure*