



# International Workshop on the Materials Imaging and Dynamics Instrument at the European XFEL

October 28/29, 2009

European Synchrotron Radiation Facility (ESRF), Grenoble, France

## Draft program

### Wednesday October 28<sup>th</sup>

8.30 – 9.00 Registration

#### Session I. X-ray FELs and MID instrument

9.00 – 9.05 H. Reichert  
*Welcome note*

9.05 – 9.20 M. Altarelli  
*Status of the European XFEL*

9.20 – 9.45 Th. Tschentscher  
*The MID instrument at the European XFEL*

9.45 – 10.15 I. Vartaniants  
*Coherent Diffraction Imaging using X-ray FELs*

10.15 – 10.45 C. Gutt  
*Photon Correlation Spectroscopy using X-ray FELs*

10.45 – 11.00 General discussion: MID instrument scope

11.00 – 11.20 Coffee break

#### Session II. Coherent Diffraction Imaging (all talks 25+5 min)

11.20 – 11.50 S. Ravy  
*Coherent diffraction for condensed matter physics*

11.50 – 12.20 T. Salditt  
*CDI imaging of supported bio-objects*

12.20 – 12.50 E. Vlieg  
*Study of the initial stages of crystallization*

12.50 – 14.00 Lunch

#### Session III. X-ray Photon Correlation Spectroscopy (all talks 25+5 min)

14.00 – 14.30 P. Wochner  
*X-ray Cross Correlation Analysis*

14.30 – 15.00 B. Stephenson  
*Large-q photon correlation spectroscopy*

15.00 – 15.30 L. Cipelletti  
*Soft condensed matter studies*

- 15.30 – 15.50      Tea/Coffee break
- Session III. Instrumentation** (all talks 20+10 min)
- 15.50 – 16.20      H. Sinn  
*X-ray optic and beam transport effects to FEL radiation properties*
- 16.20 – 16.50      A. Robert  
*The XPCS instrument at LCLS*
- 16.50 – 17.20      S. Boutet  
*CDI experiments at the LCLS*
- 17.20 – 18.00      H. Graafsma  
*Area detector developments for CDI and XPCS experiments*

**Session IV. Instrumentation working groups**

- 18.00 – 18.30      Definition of working groups and their tasks.  
Suggested working groups:  
WG I    CDI (O. Thomas & I. Vartanians)  
WG II   XPCS (Ch. Schüßler-Langeheine & G. Grübel)
- 20:00          Dinner at *PIGNOL Sainte Cécilie*** (18, Rue d'Alma, 38000 Grenoble)

**Thursday October 29<sup>th</sup>**

- 9.00 – 13.00      WG I & II    (each incl. short presentations, e.g. 3 x 15 min.)
- WG I   CDI
- N. Vaxelaire / *Coherent Diffraction Imaging of strains as a tool to investigate the mechanics of polycrystals*
  - H. Poulsen / *Material research studies with coherent x-rays at XFEL*
  - I. Robinson / *Coherent diffractive imaging at XFEL*
- WG II XPCS
- B. Sepiol / *Atomic diffusion investigation by XPCS*
  - A. Madsen / *Recent XPCS activities and their relation to XFEL experiments*
  - H. Sinn / *Phonons with XPCS*

Coffee/Tea will be available during the sessions

- 13.00 – 14.00      Lunch break
- 14.00 – 15.00      WG I & II: Preparation of initial drafts of working group report
- 15.00 – 15.20      Coffee/Tea break

**Session VII. Concluding session**

- 15.20 – 15.50      WG-1 & WG-II chairs  
*Presentation of working group findings*
- 15.50 – 16.50      General discussion: MID instrument scope & realization
- 16.50 – 17:00      NN  
*Summary of the Workshop*

**End of workshop**