

PhotonDiag2015 - Workshop on FEL Photon Diagnostics, Instrumentation, and Beamlines Design

Monday 08 June 2015

Registration - Foyer (11:00-12:30)

Welcome lunch - Cafeteria (12:30-14:00)

Welcome and opening remarks - Main Hall (14:00-14:15)

Photon Diagnostic - Facility Reports (14:15-15:55)

S. Moeller - Recent developments of photon beam diagnostics at LCLS (14:15-14:45)

M. Yabashi - X-ray optics and diagnostics at SACLA (14:45-15:15)

P. Juranic - Photon Diagnostics at SwissFEL: an Overview (15:15-15:35)

J. Gruenert - Progress on Photon Beam Diagnostics for the European XFEL facility (15:35-15:55)

Coffee break - Foyer (15:55-16:20)

Photon Diagnostic Techniques (16:20-18:20)

D. Rich - LCLS variable energy hard X-ray single-shot spectrometer (16:20-16:40)

M. Braune - The Online Photoionization Spectrometer OPIS at FLASH (16:40-17:00)

**Y. Feng - Design challenges to diagnostics and components for high repetition rate X-ray FELs
(17:00-17:20)**

J. Viefhaus - The P04 Online Diagnostic Unit in Action at FEL Facilities (17:20-17:40)

J. Rehanek - The high-resolution single-shot spectrometer used at the SwissFEL (17:40-18:00)

**A. Matruglio - A novel approach in the free-electron laser (FEL) diagnosis based on Pixeled Phosphor
Detector (PPD) (18:00-18:20)**

Tuesday 09 June 2015

FEL Optics I (09:00-10:30)

H. Sinn - Ultrahigh performance mirrors for the European XFEL (09:00-09:30)

F. Siewert - Gratings for Synchrotron and FEL-beamlines - a project for manufacture of ultra-precise gratings at Helmholtz Zentrum Berlin (09:30-09:50)

M. Stoermer - Preparation and characterization of boron carbide coatings for advanced research light sources (09:50-10:10)

K. Yamauchi - High precision multilayer mirror for nanofocusing of X-ray free electron laser (10:10-10:30)

Coffee break - Foyer (10:30-10:50)

FEL Optics II (10:50-12:40)

L. Juha - FEL-induced damage to various materials and structures: unwanted and wanted phenomena (10:50-11:20)

R. Sobierajski - Damage processes of optics under irradiations with the intense XUV and x-ray FEL pulses at characteristic time scales and intensity regimes (11:20-11:40)

I. Freijo - Commissioning of mirrors metrology at European XFEL (11:40-12:00)

M. Manfredda - Measurement of the Modulation Transfer Function from speckle field (12:00-12:20)

D. Spiga - Active shape correction of a thin glass mirror for X-ray astronomy (12:20-12:40)

Lunch - Cafeteria (12:40-14:00)

FEL Optics & Photon Beam Transport (14:00-15:30)

U. Flechsig - Design of the X-ray Optics for SwissFEL (14:00-14:30)

C. Svetina - Forthcoming beamlines at the FERMI Free Electron Laser: MagneDyn and TeraFermi (14:30-14:50)

Y. Kayser - At-wavelength wavefront metrology at XFELs using grating interferometry (14:50-15:10)

T. Mey - Coherence properties of free-electron lasers (15:10-15:30)

Poster session - Foyer (15:30-16:30)

Coffee break (16:30-16:45)

Detectors & Data Handling (16:45-18:05)

G. Carini - Detection challenges with FELs: experience on the combination of a stochastic source with prototype detectors (16:45-17:15)

C. Wunderer - Detector Developments at DESY (17:15-17:45)

J. Krempasky - areaDetector: the swiss-knife-tool for Swiss-Light-Source on-line wavefront analysis (17:45-18:05)

Transfer to Social Dinner - Foyer (19:00-19:30)

Social Dinner - (19:30-23:00)

Wednesday 10 June 2015

Time-Related Beam Properties (09:00-10:20)

D. Zhu - Development and current status of temporal diagnostics at LCLS (09:00-09:30)

P. Cinquegrana - Seed laser based diagnostics at the FERMI FEL: current status and perspectives (09:30-10:00)

A. Klisnick - Influence of partial temporal coherence on autocorrelation measurements with plasma-based ASE XUV lasers (10:00-10:20)

Coffee break - Foyer (10:20-10:50)

Time-Related Beam Properties (10:50-11:30)

R. Engel - Real Time Analysis of FEL Radiation Spectra for the Estimation of Photon Pulse Duration (10:50-11:10)

M. Richter - The impact of pulse duration on multiphoton ionization in the soft X-ray regime (11:10-11:30)

Science Instruments (11:30-12:30)

F. Bencivenga - FEL-based transient grating experiments at FERMI (11:30-12:00)

S. Dziarzhytski - The VUV Raman Spectrometry at FLASH (12:00-12:30)

Closing remarks (12:30-12:45)