

Wednesday, July 4th

08:30 - 09:00

Registration

09:00 - 09:20

Opening (Gastón García, ALBA)

In-situ metrology (Chair.: Kawal Sawhney)

09:20 - 09:50

Simon Rutishauser

PSI

In-situ optics metrology and wavefront diagnostics on synchrotrons and XFELs using X-ray grating interferometry (invited)

09:50 - 10:10

John P. Sutter

Diamond

Measurement and analysis of X-ray mirror slope errors under beamline operating conditions

10:10 - 10:30

Marion Kuhlmann

DESY

Hartmann Wavefront Measurements at the EUV-FEL FLASH

10:30 - 10:50

Takashi Kimura

Osaka Univ.

Development of wavefront characterization method for nearly diffraction-limited focused hard X-ray nanobeam.

10:50 - 11:10

Hongchang Wang

Diamond

At-wavelength metrology using Moiré Fringe analysis method based on two dimensional grating interferometer

11:10 - 11:50

Coffee break

Ex-situ metrology I: interferometry (Chair.: Frank Siewert)

11:50 - 12:10

François Polack

Soleil

Determination and compensation of the "reference surface" from redundant sets of surface measurements

12:10 - 12:30

Muriel Thomasset

Soleil

A new Phase-shift Microscope Designed for High Accuracy Stitching Interferometry

12:30 - 12:50

Hirokatsu Yumoto

Spring-8

Absolute calibration of optical flats using the three-flat test at SPring-8

12:50 - 13:10

Valeriy V. Yashchuk

ALS

Ex situ metrology of x-ray diffraction gratings

13:10 - 14:30

Lunch

x-ray optical systems (Chair.: Valeriy Yashchuk)

14:30 - 15:00

Brian Ramsey

NASA

Optics Requirements for X-Ray Astronomy and developments at the Marshall Space Flight Center (invited)

15:00 - 15:20

Jens Viefhaus

Desy

The Variable Polarization XUV beamline P04 at PETRA III: Optics, Mechanics and their Performance

15:20 - 15:40

Haruhiko Ohashi

Spring-8

Beamline optics for X-ray Free Electron Laser of SACLA

15:40 - 16:20

Coffee break

16:20 - 16:40

Kazuto Yamauchi

Osaka Univ.

Hard X-ray nanofocusing and wavefront diagnosis

16:40 - 17:00

Jean-Sébastien Micha

ESRF

Thermal Bump Removal of a Monochromator Crystal under X-ray load by optimising its shape

17:00 - 17:20

Daniele La Civita

XFEL

Soft X-ray monochromator for SASE3 beamline at European XFEL

Thursday, July 5th

Beamline design and simulation (Chair.: Daniele Cocco)

09:00 - 09:30	Jacek Krzywinski	SLAC	<i>Beam Propagation Methods in X-ray optics simulations (invited)</i>
09:30 - 09:50	Cristian Svetina	Elettra	<i>A beam shaping active optics system for FERMI@Elettra FEL</i>
09:50 - 10:10	Konstantin Kaznatcheev	BNL	<i>Novel approaches to SR beamline design</i>
10:10 - 10:30	Daniele Spiga	INAF BRERA	<i>X-ray beam-shaping via deformable mirrors: analytical computation of the required mirror profile</i>
10:30 - 10:50	Lorenzo Raimondi	Elettra	<i>Microfocusing of the FERMI@Elettra FEL beam with a K-B active optics system: spot size predictions by application of the RS-Code</i>

10:50 - 11:30

Coffee Break

Fabrication I: Multilayer Optics (Chair.: Mourad Idir)

11:30 - 11:50	Alexander Rack	ESRF	<i>Modifications of coherent hard X-rays beams induced by reflection on multilayer mirrors</i>
11:50 - 12:10	Monica Fernández Perea	LLNL	<i>Ultra-short-period WC/SiC multilayer coatings for x-ray applications</i>
12:10 - 12:30	Bianca Salmaso	INAF.BRERA	<i>X-ray scattering of periodic and graded multilayer: comparison of experiments to simulation from surface microroughness characterization</i>
12:30 - 12:50	Michael Stoermer	H.-Z. Geesthacht	<i>Investigations of the coating properties of x-ray optics for advanced research light sources in the soft x-ray domain</i>

12:50 - 14:10

Lunch

14:10 - 15:10

Bus to ALBA

Ex-situ metrology II: slope measuring instruments* (Chair.: Amparo Vivo)

15:10 - 15:30	Shinan Qian	BNL	<i>Advance in nano-accuracy surface profiler (NSP) and preliminary test</i>
15:30 - 15:50	Uwe Flechsig	SLS	<i>The upgraded LTP-V @ SLS</i>
15:50 - 16:10	Josep Nicolas	ALBA	<i>Characterization of the error budget for the ALBA-NOM</i>
16:10 - 16:30	Lahsen Assoufid	APS	<i>Development of a high-performance gantry system for a new generation of optical slope measuring profilers</i>
16:30 - 16:50	Mourad Idir	BNL	<i>X-ray mirror metrology using SCOTS: Software Configurable Optical Test System</i>

16:50 - 18:20

Alba Tour

18:20 - 19:20

Bus to the Palau de la Música

19:20 - 20:40

Visit to the Palau de la Música

20:40 - 23:40

Dinner at the Mirador del Palau

* This session will take place at the ALBA auditorium

Friday, July 6th

Ex-situ metrology III: slope measuring instruments (Chair.: Lahsen Assoufid)

09:00 - 09:20 Oliver Kranz PTB *Ray-tracing simulation of autocollimators for deflectometric form measurement*

09:20 - 09:40 Jun Qian APS *Characterization of super-flat and curved mirrors with the new APS high resolution slope measuring profiler*

09:40 - 10:00 Frank Siewert HZB-Berlin *Investigations on the Performance of Autocollimator-based Slope Measuring Profilers*

10:00 - 10:20 Amparo Vivo ESRF *LTP Measurement of flat mirrors*

10:20 - 10:40 Michael Schultz PTB *High accuracy flatness metrology within the European Metrology Research Programme*

10:40 - 11:20 **Coffee Break**

Mirror manufacturing II: (Chair.: Kazuto Yamauchi)

11:20 - 11:50 Simon G. Alcock Diamond *Bimorph mirrors: the good, the bad, and the ugly (invited)*

11:50 - 12:10 Hiroki Nakamori Osaka Univ. *Development of an Ultra-Precise Deformable Mirror for X-ray Focusing*

12:10 - 12:30 Iulian Preda ESRF *Ion beam etching of a flat silicon mirror surface: a study of the shape error evolution*

12:30 - 12:50 Akihiko Ueda JTEC Corp. *Fabrication of OSAKA MIRROR for Synchrotron Application*

12:50 - 14:10 **Lunch**

14:10 - 14:30 **Final remarks**

14:30 - 14:50 **Closing**