

Session Program

15-19 Sept 2025



MEDSI2025 - 13th International Conference on Mechanical Engineering Design of Synchrotron Radiation Equipment and Instrumentation

Tuesday Poster Session

The Loop
Lund, Sweden

Tuesday 16 September

17:00

Tuesday Poster Session

Poster Session | **Location:** The Loop, Poster Session Room | **Convener:** Roberto Appio

Mechanical design of an off-axis parabolic mirror holder with six degrees of freedom

Speaker

Alexander Reich

MicroMAX beam conditioning unit

Speaker

Staffan Benedictsson

Airbox housing for Jungfrau hybrit pixel area detectors used for X-ray laser applications in vacuum

Speaker

Mr Andreas Schmidt

CXI end station at Softimax beamline MAX IV

Speaker

Niklas Johansson

The new ALBA diffractometer for microfocus beam macromolecular crystallography experiments at XAIRA beamline

Speaker

Nahikari Gonzalez

Compact multi-purpose imager for the Matter in Extreme Conditions end-station at LCLS

Speaker

Nina Boiadjieva

Microfocus tender X-ray beamline utilizing dipole radiation at BESSY II

Speaker

Janin Lubeck

High resolution beam defining slits for Korea-4GSR beamlines

Speaker

Young Duck Yun

Studies for a novel generation of the beam profile measurements (beam wire scanner) for the Large Hadron Collider (LHC)

Speaker

William Andreazza

Hybrid semitransparent beamstops for small-angle X-ray scattering instruments

Speaker

Jackson Luis Da Silva

Nano-tomo-ptychography 3D-imaging on the Swing Beamline

Speaker

Filipe Alves

Experimental station at MicroMAX**Speaker**

Mirko Milas

The new microfocus station for the NOTOS beamline at the ALBA synchrotron**Speaker**

Antoni Garcia-Herreros

Design and commissioning of a dedicated multilayer monochromator for electron beam size measurements using the Heterodyne Near Field Speckles (HNFS) technique at the ALBA synchrotron**Speaker**

Jose Maria Alvarez

CRISTALLINA-Q XFEL Diffractometers**Speaker**

Mr Norman Huber

Creating a Multi-Capillary Furnace (MCF)**Speaker**

Mark Morrow

Test beamline construction and device performance evaluation at PLS-II**Speaker**

Sang Hun Kim

Energy distribution of photoelectrons from the first mirror of a synchrotron radiation beamline**Speaker**

Ryoma Kataoka

Multilayer based soft-x-ray polarimeter at SOLARIS National Synchrotron Radiation Centre**Speaker**

Pawel Nowak

New HXS (Hard X-ray Scattering) beamline design at European XFEL**Speaker**

Nicole Kohlstrunk

CoSAXS beamline at MAX IV: optical design and sample environment for advanced SAXS/WAXS applications**Speaker**

Matheus Da Silva

In-line Sample viewer for sample alignment and visualization in SAXS/WAXS experiments at the CoSAXS Beamline at MAXIV Laboratory.**Speaker**

Jackson Luis Da Silva

Macromolecular crystallography at beamline P11

Speaker

Alexander Grebentsov

Versatile x-ray reflector extension setup for grazing-incidence experiments at SAXS Facilities for liquid surface study at Beamline P03/PETRA III**Speaker**

Dr Andrei Chumakov

A new monochromator chamber design for XUV/ soft X-ray spectroscopy at FLASH**Speaker**

Holger Weigelt

Controlling of a nano imaging test device**Speaker**

Patrik Wiljes

Technical developments of the microfocus endstation at Beamline P03/ PETRAIII**Speaker**

Jan Rubeck

FL28: A new diagnostic beamline for ultra-short XUV FEL pulses at FLASH**Speaker**

Michael Walther

Development of a white X-ray beam monitor for the undulator beamline at Korea-4GSR**Speaker**

Mr Hyung-seok Choi

Reconfiguration of the ASTRA beamline and its adaptation for Raman spectroscopy measurements**Speaker**

Marcin Brzyski

Mechanical design and implementation of a High Harmonic Generation source at the SXP instrument**Speaker**

Vahagn Vardanyan

An overview of the time-resolved capabilities and sample setups modularity at CoSAXS**Speaker**

Roberto Appio

Integrated system design of fluorescence detector and beam position monitor**Speaker**

Dr Hok-Sum Fung

A safe and X-ray transparent aluminium sample cell for high pressure and high temperature nano-diffraction imaging**Speaker**

Anne-Lise Buisson

Upgrade of crystal positioners for ESRF Double Crystal Monochromator

Speaker

Ludovic Ducotté

SPring-8 BL12B2 Attenuator Design**Speaker**

Ming-Ying Hsu

Ultra-high-resolution monochromators for XFEL applications at LCLS-II-HE: a 4f Optical approach with channel-cut crystals**Speaker**

Hengzi Wang

Remote cryo valve adjuster - a new device to improve safety and reduce cost**Speaker**

Edwin Haas

Thermal modelling, design and evaluation of a cryogenic cooling system for a beamline endstation**Speaker**

David Tillin

Automated high pressure water cell - HPWC**Speaker**

Arne Meyer

XBPF design and prototyping**Speaker**

Benjamin Moser

A new beamline for Enhanced Liquid Interface Spectroscopy and Analysis (ELISA) at BESSY II**Speaker**

Dr Stefan Hendel

FemtoMAX beamline instrumentation and femtosecond pump-probe time-resolved experiments at the MAX IV Laboratory**Speaker**

Byungnam Ahn

Rapid beamline diagnostics for upcoming BESSY II+ SoTeXS beamline**Speaker**

David Kraft

An overview of the mechanical design of the quad crystal monochromator for the I20 XAS beamline.**Speakers**

Callum Tetrault, Mark Hooper

Applying advanced manufacturing techniques to improve in-vacuum cooling within the SWIFT beamline.**Speaker**

Owen Harding

Hexi: The High-energy Electron Xtallography Instrument

Speaker

Michela Semeraro

Scanning and transfer of cryogenic samples in the BioNanoProbe-II instrument at the Advanced Photon Source**Speaker**

Mr Benjamin Davis

Sample environment @ PETRA III for in-situ & operando x-ray experiments**Speaker**

Jan Torben Röh

The extreme conditions catalytic cell for BL01 at ALBA**Speaker**

Antonio Carballado Costa

A new integrated x-ray diffractometer for advanced diffraction beamlines**Speaker**

Mr Raphael Richaud

Engineering design of the CDI beamline endstation at NSLS-II**Speaker**

Yi Zhu

Construction of a new beamline at PETRA III: P63 OperandoCat**Speaker**

Luis Felipe Barbosa

Optimizing SGM beamline performance: hexapod and spectroscopy enhancements**Speaker**

Tor Pedersen

Design and technical commissioning of the In Situ Nanoprobe endstation and instrument at the Advanced Photon Source**Speaker**

Mr Benjamin Davis

Introduction of a new XRF microprobe at the Australian Synchrotron**Speaker**

Mr Benjamin Pocock

A wavelength-dispersive spectrometer for resonant inelastic X-ray scattering**Speaker**

Jan Weser

Examples of 2025 upgrades and experiments at Eu.XFEL MID Instrument**Speaker**

Mr Gabriele Ansaldi

High-precision alignment of an upgraded soft X-ray polarimeter at Diamond Light Source**Speaker**

Qingxin Meng

The millisecond x-ray fast shutter for BL31 at ALBA**Speaker**

Antonio Carballado Costa

Latest progress on two new ALS-U beamlines for diffraction-limited performance**Speaker**

Maxime Bergeret

Design of the high energy microscopy beamline at Korea-4GSR**Speaker**

Yongsung Park

Flexible instrument setups: concept and experience from the SCS Beamline at european XFEL**Speaker**

Jan Torben Delitz

Designs of the first-phase beamlines for Siam Photon Source-II**Speaker**

Chanan Euaruksakul

18:00