Session Program

15–19 Sept 2025

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

Wednesday Poster Session

The Loop
Lund, Sweden

Wednesday 17 September

17:00

Wednesday Poster Session

Poster Session | **Location:** The Loop, Poster Session Room | **Convener:** Keyu Zhou

Succesfull repair of a S-Band Cavity

Speaker
Nick Strohmaier

Design of an adjustable permanent dipole magnet

Speaker
Ya Zhu

Development of Radial Magic Finger Design for Permanent Magnet Quadrupole

Speaker
Thomas Brookbank

Design of a damping wiggler at SPring-8-II as a high-energy X-ray source

Speaker
Koji Tsubota

Development of LN_2 cooled permanent magnet undulators

Speaker
Hakan Bolat

Upgrade tuning system 3rd harmonic cavity SLS 2.0

Speaker
Reto Fortunati

Design and implementation of an in-vacuum magnetic field measurement system for the TPS nonlinear in-vacuum kicker

Speaker
Chih-Sheng Yang

Design of the oscillators of an infrared free electron laser facility at Anhui University

Speaker
Mr Siyue Chen

Development of permanent magnets replacing electromagnets at NSRRC

Speaker
Jyh-Chyuan Jan

Mechanical design of the in-vacuum tapered undulator at Taiwan Photon Source

Speaker
Wei-Yang Lai

Longitudinal gradient bending magnet(LGBM) permanent magnet for Korea-4GSR Project

Speaker
YoungGyu Jung

Flange aperture gap RF contact gasket for Elettra 2.0 storage ring

Speaker
Igor Mrak

Mechanical design and development status of a Superconducting Wavelength Shifter for Sirius

Speaker
Gustavo Rovigatti de Oliveira

The beam based alignment mover in High Energy Photon Source

Speakers
Fugui Yang, Lei Wu

Mechanical design of the D-II injection striplines

Speaker
Mr Vitalii Zhiltsov

Compact permanent magnets for small bore accelerators

Speaker
Christopher Huschke

Mechanical design and finite element analysis of booster girders for particle accelerators under variable construction environments

Speaker
Dr Gwang-Wook Hong

Mechanical engineering design of the D-II injection systems

Speaker
Walter Tizzano

Mechanical analysis of quadrupole magnets for the 3 GeV storage ring of Siam Photon Source II

Speaker
thongchai Leetha

Precision by design: The eight-piece quadrupole method for high-precision pole tip placement

Speaker
Nicholas Bechtold

The girder system prototype for the ALBA II storage ring

Speaker
Javier Boyer

Thermal fatigue tests on CuCrZr photon shutters

Speaker
Sushil Sharma

Optical metrology of SOLEIL II prototype long focal bendable mirror

Speaker
Cyprian Wozniak

Mechanical structure upgrade of the Pivot KB mirror system for improved vibration and stability

Speaker
Miso Park

Design of a mirror chamber for the FL24 with 5-axis precision adjustment and additional fast pneumatic movement out of the beam

Speaker
Hilmar Bienert

Development of high stability mirror systems at HALF

Speaker
Shuaikang Jiang

Design and implementation of an optical diagnostic beamline at the BESSY II injection line

Speaker
Pauline Ahmels

Cooled photoelectron shields on the first mirror of the MAX IV soft x-ray beamlines

Speaker
Louisa Pickworth

Double crystal bent Laue monochromator: modelling and measurements up to 150 keV

Speaker
Omar Renzo Piminchumo Marinos

Progress of front ends at HALF

Speaker
Ming Chen

PETRA IV: Frontend design

Speaker
Benjamin Steiniger

KB mirror mechanics innovations for optimal nanobeam focus and stability at the ESRF ID01 beamline

Speaker
Carole Clavel

Vibration-based condition monitoring of a lead screw in the mirror positioning unit on the CIRI beamline

Speaker
Mr Marcel Piszak

Mechanical design of high heat load front-end for IVU beamline at Korea-4GSR

Speaker
Mr Jongha Park

Stitching Fizeau interferometry for X-ray optics metrology at MAX IV

Speaker
Maxime Lebugle

Thermal analysis of front end vacuum components & mirror for IVU24 beamline at the Korea-4GSR

Speaker
Sungnam Kim

Enhancing the performance of old X-ray mirrors through surface figure correction

Speaker
Jangwoo Kim

Longitudinally tuned cooling conductivity for passive preservation of xray mirror optical figure under variable shape and heat loads requirements

Speaker
Matthew Church

Progression of the development of a four-crystal monochromator for PETRA IV

Speaker
Jana Raabe

Clamping deformation patterns and solutions for LN2 cooled monochromator crystal

Speaker
Shaofeng Wang

Design of a stable Double Crystal Monochromator for synchrotron beamlines

Speaker
Seonghan Kim

As built front ends for the Advance Photon Source MBA upgrade

Speaker
Yifei Jaski

Development and fabrication of a dummy vacuum chamber for straight sections in the Siam Photon Source-II storage ring

Speaker
Thanapong Phimsen

Design and implementation of a parallel linkage mechanism with spring assembly for magnetic force compensation in insertion devices

Speaker
Wei-Yang Lai

Elettra 2.0 discrete storage ring photon absorbers

Speaker
Giulio Scrimali

Design and analysis of photon absorbers for Korea-4GSR

Speaker
Sangbong Lee

A concept improvement design of the girder adjustment system for TPS storage ring

Speaker
Tse-Chuan Tseng

Thermal stability of the Diamond storage ring

Speaker
Ella Rippin

Mechanical system of the double-period undulator prototype for SHINE

Speaker
Shengwang Xiang

Mechanical evaluation and CAD modeling for MAX 4^U: MAXIV storage ring upgrade

Speaker
Mr Karl Åhnberg

Design and analysis of the ALS-U Photon Transport Line

Speaker
Tao Cui

Design and development of the beam collimation system for CiADS

Speaker
Haihua Niu

Improving of sputtered titanium film for NIK ceramic chamber in TPS

Speaker
Chun-Shien Huang

Survey and alignment of beamlines for Advanced Photon Source Upgrade

Speaker
Altaf Khan

Systematic reduction of lattice complexity through variant minimization

Speaker
Marlon Diercks

Conceptual design of AS2 - A new synchrotron for Australia

Speaker
Brad Mountford

Collaborative design with an integrated CAD model in the PETRA IV project

Speaker
Marlon Diercks

NMX neutron instrument installation in the bunker area at the European Spallation Source

Speaker
Rosa Camilleri Lledo

LiDAR-based 3D scanning for accurate infrastructure modeling at MAX IV

Speakers
Albert Torrente, Keyu Zhou

Mock-up assembly of an SRF module: space frame as tooling and structural support for highly HOM-damped cavities

Speaker
Nora Wunderer

Layout of the ALBA II accelerator

Speaker
Llibert Ribo

Structural design of the injection and extraction electrostatic septum of PREF

Speaker
Mr Yongxiang Pan

Innovative design strategies and development of girders using topology optimization for PETRA IV

Speaker
Normann Koldrack

Diamond-II prototype girder testing

Speaker
Paul Vivian

MAX IV photoinjector gun

Speaker
Linus Roslund

18:00