**Session Program**

**20–26 Sept 2025**

# ICALEPCS 2025 - The 20th International Conference on Accelerator and Large Experimental Physics Control Systems

## *THPD Posters*

Palmer House Hilton Chicago
17 East Monroe Street Chicago, IL 60603, United States of America

# Thursday 25 September

16:15

## THPD Posters

**Poster Session** |
**Location:** Palmer House Hilton Chicago, 17 East Monroe Street Chicago, IL 60603, United States of America

### EPICS control system for Beam Operation at Saraf Linac Accelerator

**Speaker**

Alexis Gaget

### Integration of Sample Temperature Control and X-ray Data Acquisition at the TPS 13A Biological Small- and Wide-Angle X-ray Scattering Beamline

**Speaker**

Cheng-Yuan Lin

### Pycumbia: Bridging high-performance control logic and Python simplicity for modern UIs

**Speaker**

Lucio Zambon

### Gas supply control system for straw tube detectors in the PANDA experiment

**Speaker**

Mr Lukasz Zytniak

### BEC widgets: A modern modular framework for Beamline Experiment Control

**Speaker**

Jan Wyzula

### Event-driven alarm management in the Karabo SCADA system

**Speaker**

Florian Sohn

### Updating and operating the Machine Protection System at J-PARC MR

**Speaker**

Takuro Kimura

### Ten years experience of operating tiny fanless severs as EPICS I/O controllers for J-PARC Main Ring

**Speaker**

Shuei Yamada

### KEK electron/positron injector LINAC safety system

**Speaker**

Masanori Satoh

### BL31-FaXToR, hard X-ray micro-tomography and radiography at ALBA: current status and ongoing improvements

**Speakers**

Zbigniew Reszela, Dr Fulvio Becheri

### Third and fourth phase update of control network in J-PARC MR

**Speaker**

Kenichi Sato

## Radiation monitoring system using a PIN photodiode at the KEK electron/positron injector LINAC

**Speaker**

Itsuka Satake

## Process orchestration and system configuration in the MeerKAT radio telescope

**Speaker**

Rishad Ebrahim

## Automating x-ray beam alignment processes with the split-and-delay graphical user interface at LCLS

**Speaker**

Carolyn Gee

## Real-time experiment steering at European XFEL within Karabo

**Speaker**

Cammille Carinan

## A client for the ATLAS time machine

**Speaker**

Ananth Ramaswamy

## Worry-free Experimental Metadata collection tool for Tango-Controls/TINE and HDF5

**Speaker**

Igor Khokhriakov

## ESS accelerator personnel safety system journey towards steady state operation

**Speaker**

Vincent Harahap

## The novel and robust design of fast protection system for CSNS-II

**Speaker**

Peng Zhu

## Design and performance of the SNS credited beam power limit system

**Speaker**

Kelly Mahoney

## Logging a new era at the APS using BELY

**Speaker**

Dariusz Jarosz

## A new accelerator user experience working group

**Speaker**

Tiffany Tran

## An Agile/XP software development process for modernizing the accelerator control system at Fermilab

**Speaker**

John Diamond

## The control and safety system for the JULIC neutron platform target station

**Speaker**

Harald Kleines

## Using Grafana as a representation layer for control data at the European XFEL

**Speaker**

Valerii Bondar

## EPICS diffractometer control with HKL calculations

**Speaker**

Alexander Baekey

## Integrated control systems for time-resolved RIXS at LCLS-II: design and operational challenges

**Speaker**

Dr Jyoti Joshi

## Status of HEPS beamline control system

**Speaker**

Gang Li

## The LCLS-II modular optical delivery system: lessons learned

**Speaker**

Adam Berges

## Signal response and analysis of large micro channel plate driven delay line detectors

**Speaker**

Dr Peter Sjöblom

## Secure EPICS PVAccess deployment framework for external scientific networks integration using Kerberos, LDAPS, and PKI at SLAC

**Speaker**

Jingchen Zhou

## Design and control of liquid sample delivery systems at LCLS

**Speaker**

Josue Zamudio Estrada

## First light received by Beamline Experiment Control

**Speaker**

Christian Appel

## Hardware orchestrated, multi-dimensional, continuous scans with the IcePAP motion controller

**Speaker**

Marcelo Alcocer

## Hardware orchestration architecture for fly and step scan at SIRIUS beamlines: a distributed, multi-platform system for sub-micrometer motion and data acquisition synchronization in on-the-fly synchrotron measurements

**Speaker**

Telles René Silva Soares

## EPICS in practice at LCLS

**Speaker**

Kaushik Malapati

## Streamlining and updating user interfaces for LANSCE operations using Python

**Speaker**

Greg DeLaTorre

## Elettra Commander: A flexible web interface on large touchscreens

**Speaker**

Lucio Zambon

## Enhancing CERN experimental areas beamline configuration management with data-driven schematics

**Speaker**

Mr Lukasz Burdzanowski

## Integration of microchannel plate delay line detector in SXP instrument and Karabo control system at European XFEL

**Speaker**

Ivars Karpics

## Operating system security updates and network boot support for Libera instruments

**Speaker**

Mr Miloš Bajič

## Design of a laser safety system for S3

**Speaker**

Nicolas Simon-Bauduin

## Development of a fast orbit interlock system prototype for the 4GSR

**Speaker**

Jinsung Yu

## Integrated display management for control screens at APS accelerator complex

**Speaker**

Lingran Xiao

## Towards next-generation instrument control framework for neutron experiments at MLF, J-PARC

**Speaker**

Kentaro Moriyama

## A dual-network centralized control system for Elettra 2.0

**Speaker**

Lorenzo Pivetta

## The operation mode for SHINE machine protection system

**Speakers**

Yingbing Yan, Chunlei Yu

## Micro-TCA-based data acquisition for APS radio frequency systems

**Speaker**

Timothy Madden

## Augmented reality for accelerator operations: A virtual control room prototype

**Speaker**

Thorsten Hellert

## Facility monitoring system

**Speaker**

Nicholas Waters

## Design of RAON operation monitoring via screen capture in isolated networks

**Speaker**

Mijeong Park

## Managing shifts in the NA61/SHINE experiment: development of the shift scheduler system

**Speaker**

Marcin Slodkowski

## Streamlining Phoebus OPI screen creation and maintenance with OPI-Generator

**Speaker**

Tong Zhang

## Redesign of the Timeline Generator at Fermilab using a web-based Flutter application, GraphQL API and an IOC

**Speaker**

Linden Carmichael

## WRAP: Integrating an event processing framework

**Speaker**

Epameinondas Galatas

## Preparing the migration of Python GUIs from Qt5 to Qt6 at CERN

**Speaker**

Ivan Sinkarenko

## Prometheus system monitoring stack

**Speaker**

Trymore Gatsi

## Design of the machine interlock system for Korea-4GSR

**Speaker**

Yunho Kim

## IC@MS – web-based alarm management software

**Speaker**

Mr Lukasz Zytniak

## Real-time EPICS-integrated RAON timing system enhancements

**Speaker**
eunsang kwon

## Update of Linac and RCS MPS for BLM

**Speaker**
Hiroki Takahashi

## Integration of a tape drive sample delivery system at the European XFEL

**Speaker**
Ana García-Tabarés Valdivieso

## myLog: A modern, integrated logbook for scientific collaboration at European XFEL

**Speaker**
Luis Maia

## A multi-level monitoring interface for the SKA Central Signal Processor using the Taranta synoptic view

**Speaker**
Gianluca Marotta

## Enhancing user experience through GUIs and helper routines at MOGNO, the micro and nano tomography beamline at SIRIUS

**Speaker**
Lucca Campoi

## Access Control Interlock System Upgrade at ANL/APS

**Speaker**
James Stevens

## Control and acquisition system for a radar-based IFMIF-DONES lithium target diagnostic

**Speaker**
Víctor Villamayor Callejo

## Interfacing custom (EPICS) software with in-house developed frame-grabbers & commercial cameras

**Speaker**
Michael Skoufis

## Improving cybersecurity on the Laser Megajoule Facility

**Speaker**
Jean-Philippe Airiau

## Observation planning tool for the MeerKAT radio telescope

**Speaker**
Zanele Kukuma

## Building on experience: renovation of the SNIFFER gas and fire protection system for the LHC experiments

**Speaker**
Timo Hakulinen

## IFMIF-DONES advanced machine protection system

**Speaker**

Ruben Lorenzo Ortega

### Design and implementation of a scalable machine protection system for the EuAPS particle accelerator

**Speaker**

Valentina Dompè

### Design and deployment of a slow protection layer for a 100 MeV LINAC safety at KOMAC

**Speaker**

JAE-HA KIM

### Lifecycle management tools in the development of SNS credited safety systems

**Speaker**

Kelly Mahoney

### Preliminary design for beam charge monitoring interlock system for Advanced Light Source at Lawrence Berkeley National Lab

**Speaker**

Denis Paulic

### Ensuring the fast response in the powering interlock controller (PIC) upgrade: a UNICOS-based approach

**Speaker**

Mr Jesus Fernandez Cortes

### Management of server and network infrastructure at SuperKEKB

**Speaker**

Dr Hitoshi Sugimura

### The ESS Fast Beam Interlock System – design, deployment and commissioning till the beam on dump

**Speaker**

Dr Stefano Pavinato

### The ESS fast beam interlock system history buffer for post-mortem analysis and accelerator statistics

**Speaker**

Dr Stefano Pavinato

### CERN safety system monitoring - entering a new era

**Speaker**

Tono Riesco

### Development and operation of the new beam interlock system of RIKEN RI Beam Factory

**Speaker**

Misaki Komiyama

### Upgrades to the FACET-II data acquisition system

**Speaker**

Sharon Perez

### Efficient Multi-Region Fly-Scan Architecture Using PLC Integration for Synchrotron XAS

**Speaker**

Cheng-Chih Liang

### Development of a high-precision electrometer at NSLS-II

**Speaker**

Yuke Tian

### Image logging and annotation in Karabo for improved experimental monitoring

**Speaker**

Ana García-Tabarés Valdivieso

### Bluesky Queue Server for beamline control at NSLS-II

**Speaker**

Dmitri Gavrilov

### EPICS IOC development for high-speed, high-resolution imaging with the AXIS-SXRF-60 camera

**Speaker**

Kuktae Kim

### Polka - web management tool for TANGO controls

**Speaker**

Mr Lukasz Zytniak

### CSS to Phoebus transition at KIT

**Speaker**

Dr Edmund Blomley

### TDM, a modern display manager based on web technologies

**Speaker**

Hao Hao

### Maintainable web interfaces at beamlines

**Speaker**

Seij De Leon

### PyDM: Updates and roadmap

**Speaker**

Mr Nolan Stelter

### From testing to verification: a comprehensive methodology for industrial controls frameworks

**Speaker**

Loreto Gutierrez Prendes

### Continuous Integration meets industrial automation: testing industrial controls frameworks

**Speaker**

Ms Loreto Gutierrez Prendes

### Migration of SNS cryogenic system alarms from the softioc-based alarm handler to BEAST

**Speaker**

Marnelli Martinez

## A server for the ATLAS time machine

**Speaker**

Matthew Torres

## Scalable and standardized PLC development: an automated framework for CERN's Cooling and Ventilation systems

**Speaker**

Rafael Figueiras dos Santos

## A flexible validation framework for streamlining hardware testing in accelerator control systems

**Speaker**

Alvaro Martinez Landete

## Smart guided commissioning of industrial control systems

**Speaker**

Jose Manuel de Paco Soto

## Smart watch and control in accelerator control system

**Speaker**

Wenge Fu

## Automated testing of the integrated computer control system at the National Ignition Facility

**Speaker**

David Gibbard

## Sisyphean Tasks: Software Development for the ACR

**Speaker**

Yekta Yazar

17:45