Session Program

27-29 Oct 2025



Artificial Intelligence for the Electron Ion Collider (AI4EIC) 2025

AI/ML for Calibration, Monitoring, and Experimental Control with Data Streams

Monday 27 October

14:30

AI/ML for Calibration, Monitoring, and Experimental Control with Data **Streams**

Session

14:30-14:55

Tree-distilled autoencoders on FPGA for anomaly detection and data compression

Speakers

Tae Min Hong, Tae Min Hong

14:55-15:20 Compression by Importance and More

Speaker

Yi Huang

Al-Enabled Data Quality Monitoring with Hydra 15:20-15:45

Speaker

Thomas Britton

15:45-16:00 Coffee break

16:00-16:25 SMOCS - JLab's Streaming Monitoring Optimization Control System

Speaker

Armen Kasparian

16:25-16:50

Real-time Al-based dead hot map in the ePIC detector: a self-adaptive alternative to traditional big data calibration pipelines

Speaker

Balazs Ujvari

Optimal Control of Polarized Sources and Targets 16:50-17:15

Speaker

Patrick Moran

17:15-17:30 **Discussion**

17:30