

Session Program

25-29 May 2026

**25th IEEE Real Time Conference - La Biodola,
Elba, Italy**

Data Acquisition and Trigger Architectures

La Biodola - Isola d'Elba (Italy)

Monday 25 May

15:45

Data Acquisition and Trigger Architectures

Session | **Location:** Hotel Hermitage, Maria Luisa Room | **Convener:** Martin Grossmann PSI

15:45-16:05

Picosecond-level Clock Distribution System of the LHCb Experiment at CERN

Speaker

Alberto Perro

16:05-16:25

A Machine Learning-Based Real-time Anomaly Detection System

Speaker

Shuihan Zhang

16:25-16:45

The Final Run of the sPHENIX Experiment

Speaker

Martin Lothar Purschke

16:45

17:15

Data Acquisition and Trigger Architectures

Session | **Location:** Hotel Hermitage, Maria Luisa Room | **Convener:** Marc-André Tétrault

17:15-17:35

GPU-Based Level-3 Real-Time Trigger for the Belle II High Level Trigger System

Speaker

Prof. Ryosuke Itoh

17:35-17:55

Real-time DAQ System for Muon-Spin Spectroscopy

Speaker

Marius Snella Köppel

17:55-18:15

Data reduction in CMS

Speaker

Silvio Donato

18:15-18:35

JUNO DAQ: Operational Status and Recent Advances

Speaker

Xiaolu Ji

18:35-18:55

The phase-1 upgrade of the ATLAS level-1 calorimeter trigger

Speaker

Niklas Schmitt

19:00

Tuesday 26 May

16:50

Data Acquisition and Trigger Architectures

Session | **Location:** Hotel Hermitage, Maria Luisa Room | **Convener:** Stefan Ritt

16:50–17:10

Optimising demanding I/O applications: the HL-LHC ATLAS Readout case study

Speaker

Carlo Alberto Gottardo

17:10–17:30

Wireless TDAQ Upgrades for the PEPS Surface Detector Array

Speaker

Yifan Yang

17:30–17:50

Development of a New Data Acquisition System for Subthreshold Pion Production Experiment

Speaker

Sun-Young Ryu

17:50–18:10

The Central Trigger Processor board for the Advanced SiPM-based camera of the CTA Large-Sized Telescopes

Speaker

María Molina Delicado

18:10–18:30

A Congestion-Aware RDMA Front-End for LST Advanced Camera Readout

Speaker

Filippo Marini

18:30–18:50

Fast Beam Position Calculation Implemented in FPGA

Speaker

Mr Wei Peng

18:50

Thursday 28 May

09:10

Data Acquisition and Trigger Architectures

Session | Location: Hotel Hermitage, Maria Luisa Room

09:10–09:30

Timing Distribution Method via 10-km Optical Fibers at the J-PARC for the Hyper-Kamiokande Project

Speaker

Che-Sheng Lin

09:30–09:50

TD-Link: A Deterministic Optical Daisy-Chain Link for Synchronous Data Acquisition in Large-Scale Detector Systems

Speaker

Dr Andrea Abba

09:50–10:10

Commissioning and Low Latency Operation of the Graph Neural Network Electromagnetic Calorimeter Trigger at the Belle II Experiment

Speaker

Marc Neu

10:10

15:00

Data Acquisition and Trigger Architectures

Session | Location: Hotel Hermitage, Maria Luisa Room

15:00–15:20

A Real Time Archiving Framework from EPICS to Time Series Databases for Fusion Plant Data

Speaker

Dr Guang Yang

15:20–15:40

Repurposing acquisition devices into trigger-based timing synchronization of break-down events during MITICA high voltage holding experiments

Speaker

Andrea Rigoni Garola

15:40–16:00

Design and Evaluation of DAQ Architectures for Prompt-Gamma Timing in Particle Therapy

Speaker

Felix Mas Milian

16:00–16:20

Fast ML on FPGA for Particle Identification and Tracking

Speaker

Sergey Furletov

16:20-16:40

Online Data Reduction for the ePIC dRICH Using a Multi-FPGA Neural Network**Speaker**

Cristian Rossi

16:40-17:00

Implementation of New Time Protocols on CTS Board for Clock Synchronization**Speaker**

Genie Jhang

17:00

17:30

Data Acquisition and Trigger Architectures**Session** | **Location:** Hotel Hermitage, Maria Luisa Room

17:30-17:50

Triggerless Data Acquisition for Online Reconstruction in High-Rate Experiments**Speaker**

Yifeng Wang

17:50-18:10

CGEM -IT Data Acquisition system**Speaker**

Gianluigi Cibinetto

18:10-18:30

Studies of FPGA accelerated track reconstruction for the ATLAS Event Filter**Speaker**

Kevin Sedlaczek

18:30-18:50

Status and testing of the MDT Trigger Processor for the ATLAS Level-0 Muon Trigger at HL-LHC**Speaker**

Rimsky Alejandro Rojas Caballero

18:50-19:10

Data Acquisition Architecture in TELE-NEURART project**Speaker**

Dr Donato Romano

19:10