Session Program

May 25 – 29, 2026

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

AI, Machine Learning, Real Time Simulation, Intelligent Signal Processing - PS

La Biodola - Isola d'Elba (Italy)

Wed, May 27

11:05 AM

AI, Machine Learning, Real Time Simulation, Intelligent Signal Processing - PS

Poster Session | **Location:** Hotel Hermitage, Elena Room | **Convener:** Riccardo Paoletti

FPGA-Deployed Variational Autoencoder for Real-Time Soft X-Ray Electron Temperature Reconstruction in RFX-mod2

Speaker
Luca Orlandi

A High-performance DOI Encoding Algorithm for PET Detectors with High Coupling Ratio

Speaker
Yonggang Wang

Event-Driven Spiking Neural Networks for Emergent Robotic Swarm Behavior

Speaker
Dr Marcos Turqueti

Self-Supervised and Semi-Supervised Machine Learning for Waveform-Based Neutron/Gamma Discrimination in EJ-276 Plastic Scintillator

Speaker
Ms Anh Mai

Studies for a track finder algorithm based on Graph Neural Networks for the MEG II experiment

Speaker
Antoine Venturini

A Maximum Log-Likelihood Regression Approach for Quantitative Mixture Prediction in PGNAA Spectroscopy

Speaker
Helmand Shayan

A Scalable Intelligent Agent System for Automated Monitoring and Debugging Support of the JUNO Electronics system

Speaker
Yifan Yang

A 1D-Convolutional Autoencoder for Pulse Compression in Nuclear DAQ Systems

Speaker
Jose Manuel Deltoro Berrio

An Initial Study of Neural-Network-Assisted Approaches for Drift Chamber Tracking

Speaker
Mr Viet Nguyen

Design-Space Exploration and Integer Quantization of Graph Neural Networks for Real-Time FPGA Track Finding

Speaker
Andrea Cardini

Real-Time Machine-Learning Inference Workflows at FRIB using EJFAT and ESNet

Speaker
Giordano Cerizza

12:05 PM