

Session Program

6-10 Oct 2025



TWEPP 2025 Topical Workshop on Electronics for Particle Physics

Poster 1

Rethymno, Crete, Greece
Aquila Rithimna Beach Crete, Greece

Tuesday 7 October

13:40

Poster 1

Poster Session | **Location:** Athina hall

Radiation Qualification of Cryogenic Instrumentation Electronics for CERN's HL-LHC Upgrade and LHC Infrastructure

Speaker

Nikolaos Trikoupis

Filters and redundancies: an exploration of novel coherent noise filters for high energy physics

Speaker

Felipe William da Costa

Development of Low-Mass Flex PCB and Nanowire Interconnect Technologies for HEP Module Integration

Speaker

Abhishek Sharma

A Shunt-LDO for the Electron Ion Collider in a 110nm CMOS Process

Speaker

Iain Sedgwick

Limits of Successive Approximation Register (SAR) ADC architecture

Speaker

Miquel Ribalda Galvez

SALSA1

Speaker

Béatrice Guénégó

Radiation hardness compatibility of vacuum gauge electronics for the HL-LHC era

Speaker

Nikolaos Chatzigeorgiou

TID reliability of voltage translators for the ATLAS muon trigger system

Speakers

Sabrina Perrella, Yasuyuki Horii

A radiation tolerant digital quench detector for the LHC's superconducting main dipole magnets

Speaker

Jens Steckert

The fabrication of the half-cylinder-shaped 10 Gb/s signal and flexible printed circuit power and data cable for ALICE ITS3

Speaker

Marc Alain Imhoff

Performance of a New Generation Controller for the Power Systems of HEP experiments

Speaker

Emanuele Romano

Advancements in Power Supply Systems for the High-Luminosity Large Hadron Collider (HL-LHC)

Speakers

Andrea Guatterri, Dr Ferdinando Giordano

Measurement of the SEU rate and the demonstration of automated recovery for the Kintex-7 FPGA on TGC readout boards in the ATLAS Experiment at HL-LHC

Speakers

Daisuke Hashimoto, Yasuyuki Horii

Characterization of the bPOL48V GaN DC-DC Buck Converter for R&D on Future Particle Collider Power Systems

Speaker

Joelle Savelberg

first tests of laser power transmission for HEP

Speaker

Yan Benhammou

Using Open Source EDA Tools in ASICs for HEP: A mixed comparison

Speaker

Felipe William da Costa

PRISME: A radiation tolerant low power Phase-Locked Loop in a 65 nm technology for precision clocking at EIC

Speaker

Mr Florent Bouyjou

A 11-Gbps CMOS-logic serializer core for high-energy physics experiments

Speaker

Xiaoting Li

Design of a Radiation-Tolerant Thermal Control Unit for Silicon Photonics Modulators in 28-nm CMOS Technology

Speakers

Gabriele Atzeni, Gabriele Ciarpi

Design of a 25 Gb/s High-Voltage Radiation-Tolerant Driver for SiPh Modulators in 28 nm CMOS Technology

Speaker

Gabriele Ciarpi

Analysis of Frequency Tuning Techniques for SET Resilience in Ring Oscillators using a Calibrated SEE Model

Speaker

Venkata Sathyajith Kampati

Study of on-chip artificial neural network for incident angle classification

Speaker

Ruiguang ZHAO

A 65nm CMOS Four-Channel Readout ASIC for ATLAS Muon Drift Tubes: 5-100fC detection, 15ns Peaking time, and 8mV/fC Sensitivity**Speaker**

Syed Adeel Ali Shah

A Low-Power Timing Chip Prototype for Strip LGAD Readout**Speaker**

Jingbo Ye

Probe station tests of AltirocA wafers for ATLAS HGTD**Speaker**

Jimmy Jeglot

Performance and automatic calibration scheme of the waveform sampler in the ETROC2 ASIC chip**Speaker**

Dr Jinyuan Wu

ETROC2 as the final version for CMS MTD Endcap Timing Layer (ETL) upgrade**Speaker**

Tiehui Ted Liu

SALSA: a new versatile ASIC for the readout of MPGD detectors**Speaker**

Dr Olivier Gevin

Towards Enhanced Timing for Mu3e: The Ultra-Fast Silicon Pixel Detector**Speaker**

Ivan Peric

CALOROC1B: an integrated front-end ASIC to readout SiPMs for the ePIC detector at EIC**Speaker**

Pedro Pablo DUMAS ZIEHLMANN

High-speed readout controller and communication protocol for pixel detectors**Speaker**

Dr Piotr Otfinowski

Characterization of an asynchronous front-end circuit in 28 nm CMOS for pixel readout in future HEP experiments**Speaker**

Luigi Gaioni

On-Chip Packets Sorting for High-Throughput Data-Driven Pixel Detectors in a 28 nm CMOS Technology**Speaker**

Francesco Enrico Brambilla

Results from tests of the Ignite32/64 ASICs in CMOS 28-nm technology

Speaker
Adriano Lai

Design and first results of COFFEE3, a pixel sensor prototype using 55nm HVCMOS process

Speaker
Xiaomin Wei

Evaluation of Total Ionising Dose effects on HV-CMOS pixel sensors in 150 nm technology

Speaker
Chenfan Zhang

Characterisation of Pixel Detectors with Test Beams for the Inner Tracker Upgrade of the ATLAS

Speakers
Mahima Sachdeva, Simone Ravera

Development of a triggerless readout energy measuring and timestamp ASIC for silicon microstrips sensors

Speaker
Daniela Calvo

Charge collection parameterization of MALTA2, a Depleted Monolithic Active Pixel Sensor

Speaker
Lucian Fasselt

Wafer-Scale On-Chip Data Transmission for ALICE ITS3 MOSAIX Chip

Speaker
Joao De Melo

MightyPix - A Novel High Voltage Monolithic Active Pixel Sensor for the proposed LHCb Mighty-Tracker

Speaker
Nicolas Striebig

Design, simulation and characterization of the ALICE ITS3 MOSS analog front-end

Speaker
Simone Emiliani

15:20