Session Program

1–13 Sept 2025

INFIERI 2025

POSTERS SESSION

University of Pisa and INFN Sezione di Pisa

Saturday 13 September

14:00

POSTERS SESSION: Posters presentation by students

Session |
Location: Building B, Pontecorvo area (Polo Fibonacci), Corridors of Floor 1, Largo B. Pontecorvo, 3 56127 Pisa

14:00–14:10
Testbeam studies of MALTA2 sensor using 180 GeV hadron beam at SPS CERN

Speaker
Anusree Vijay

14:00–14:10
From Classical to Quantum Black Hole Thermodynamics: An Effective Action-Based Approach

Speaker
Federica GUARDUCCI

14:10–14:20
Testing and validation of new OBDT-Theta electronic boards for CMS DT upgrade

Speaker
Rolando Paz Herrera

14:10–14:20
CMS-LHC RUN III: SEARCH FOR ttHH((HH->4b)

Speaker
Gabriel Vinicius Vian

14:20–14:30
Thermal Cycling of Modules for the Upgrade of the CMS Outer Tracker

Speaker
Aenne Abel

14:20–14:30
electronCT: Calibration Studies for Imaging Technique with 50-250 MeV Electron

Speaker
Leticia Braga da Rosa

14:30–14:40
"Quantification of Metabolic Dynamics and Vigor in Maize Seeds Through 18F-FDG PET Imaging".

Speaker
Michelle Kattan

14:30–14:40
Simulation of Solid-State Particle Detectors with Arbitrary Geometries using Physics-Informed Neural Networks (PINNs)

Speaker
Alessandro Rosa

14:40–14:50
Finite-size DMRG characterization of the 1D spinless Fermi-Hubbard model phase diagram within the Bosonization framework

Speaker
Alessandro Gori

14:40–14:50 **Radiation-Hardened Electronics Designs for a CMOS Image Sensor**

Speaker
Pengxu Li

14:50–15:00 **Search for CP violation in 0 → 0 ∓ ± decays at LHCb**

Speaker
Francesco Paciolla

14:50–15:00
Development of Graphical User Interface (GUI) for the CERN- CMS Outer Tracker Testing Facility

Speaker
Sayan Dhani

15:00–15:10 **ERB291004 THE BOAT**

Speaker
Letizia Perfetta Pullano

15:00–15:10 **Lattice QCD: simulating quark transition phase**

Speaker
Antonino Calderone

15:10–15:20
QC Procedure and Performance Tests of LD Hexaboard PCBs for the CMS HGCAL Detector

Speaker
Gizem Gul Dincer

15:10–15:20 **Flat TBPS Inte ration Testin or the CMS Outer Tracker Up rade**

Speaker
Itzelli Salazar Segovia

15:20–15:30 **CMS track reconstruction performance during Run 3**

Speaker
Ruben Forti

15:20–15:30
PARTICLE THERAPY AND FLASH THERAPY: A glimpse into the future of cancer treatments

Speaker
Mattia Pesaresi

15:30–15:40
SILICON SENSORS FOR HIGH PRECISION 4D TRACKING: THE RESISTIVE SILICON DETECTOR

Speaker
Leonardo Lanteri

15:30–15:40 **FLASHSIM: END-TO-END SIMULATION WITH FLOW MATCHING**

Speaker
Francesco Vaselli

15:40–15:50
Simulation on the improved Resistive Plate Chamber (iRPC) Performance using Garfield++

Speaker
Tahany Elhussieny Abdelhameid

15:40–15:50
Timing resolution of thin LGAD sensors in high radiation environments

Speaker
Robert Stephen White

15:50–16:00
SEARCH FOR NEW PHYSICS IN THE $t\bar{t}$+MET FINAL STATE WITH THE ATLAS EXPERIMENT

Speaker
Mr Daniele Dal Santo

15:50–16:00 **LATTICE QCD – QUARK PHASE TRANSITION AND MESON DECAY**

Speaker
Gaia Domenici

16:00–16:10 **THE MöSSBAUER EFFECT**

Speaker
Filippo Fedi

16:00–16:10
Advancing Accessible High-Resolution SPECT Imaging with VIP-Based Detectors

Speaker
Salvador Moreno

16:10–16:20
Machine-Learning-Based Vertex Reconstruc6on with MTD Track Timing at CMS

Speaker
Prabhat Solanki

16:10–16:20
Understanding the background of the Imaging X-ray Polarimeter Explorer (IXPE)

Speaker
Stefano Silvestri

16:20–16:30
Study of the Virgo SuperAttenuator vertical control to improve low frequency performance

Speaker
Maria Antonietta Palaia

16:20–16:30
Development of Transition Edge Sensors - Tc dependence on cross-section of Nb wires

Speaker
Anastasia Kotsovolou

16:30–16:40
GWBird:a toolkit for the characterization of the Stochastic Gravitational Wave Background for Ground, Space, and Pulsar Timing Array detectors

Speaker
Ilaria Caporali

16:30–16:40
Electrolyte-Tunable Confined Polyamine Transport in Carbon Nanotube Arrays

Speaker
Giuseppe Mattia Amato

16:40–16:50 **A novel Low Gain Avalanche Diode design: MARTHA**

Speaker
Esther Constanze Wais

16:40–16:50 **Squeezed-Vacuum States for enhanced Quantum Metrology**

Speaker
Hamza Hasnaoui

16:50–17:00
Optimization of a classifier for the detection of bundle branch blocks in an electrocardiogram using TensorFlow Lite Micro

Speaker
Moises Meza-Rodriguez

16:50–17:00
Development and Commissioning of a Cost-Efficient Positron Emission

Speaker
Yannick Hartych

17:00–17:10
Design of a multi-function ASIC for reading out large SiPM-based systems

Speaker
Martina Cucinotta

17:00–17:10
Mechanical Characterization of Thin W+Au, Mo+Au, and Carbon Wires for Drift Chamber Applications

Speaker
Muhammad Saiel

17:10–17:20
Leveraging Quantum Machine Learning to Explore Novel Phenomena in Top Quark Interactions

Speaker
Parichehr Kangazian,

17:10–17:20 **Cluster Counting with Transformer-based Model**

Speaker
Asif Ali

17:20–17:30 **DAQPath: A Toolkit for Resilient, Asynchronous DAQ on FPGA**

Speaker
Marco Riggirello

17:20–17:30 **The X2O FED for the CMS Cathode Strip Chambers**

Speaker
Nick Manganelli

17:30