Session Program

July 30, 2026 to August 5, 2026

43rd International Conference on High Energy Physics

Poster session

Natal Convention Center
Via Costeira Sen. Dinarte Medeiros Mariz, 6664-6704 - Ponta Negra, Natal - RN, 59090-002

Fri, July 31

7:00 PM

Poster session: #1

Poster Session |
Location: Praiamar Natal Hotel & Convention, R. Francisco Gurgel, 33 - Ponta Negra, Natal - RN, 59090-050

The formalism of open quantum systems for superfluid helium response to neutrino atom scattering

Speaker
Alexey Lichkunov

Probing conversion-driven freeze-out at the LHC

Speaker
Lucas Magno Dantas Ramos

Spin-Independent and Spin-Dependent Dark Matter Scattering in a Many-Body Superfluid ^{3}He Target

Speaker
Adam Ting

Indirect Detection of Dark Matter with the Cherenkov Telescope Array Observatory (CTAO)

Speaker
Andres Olmos Gonzalez

Searching for MIMPs with the COSINE-100 experiment

Speaker
Vitor Machado

Search for the associated production of a Higgs boson and a single top quark in the $H \to \tau\tau$ decay mode and combined measurement of tH production using pp collisions at 13 TeV with the ATLAS detector

Speaker
Andre Sopczak

Real-Time Parametric Hypothesis Testing for Faster Skipper-CCD Readout

Speaker
Lara Sofía Barreiro

Thermoelectric response of the QGP medium in a novel relaxation time approximation model

Speaker
Dr Shubhalaxmi Rath

Mueller-Navelet Jets in Diffractive Processes at LHC and FCC energies

Speaker
João Vitor Bulhões da Silva

SHELDON for new liquid scintillators characterizartion

Speaker
Fatima Houria

Real-time measurement of luminosity and beam spot properties with FPGA-based hit reconstruction at LHCb

Speaker
Elena Graverini

The History of Brasil’s Participation in CERN

Speaker
Dr Ivã Gurgel

Electric-Field Calibration with a Steerable UV-Laser in ProtoDUNE-HD

Speaker
Wallison Luiz Anicezio Campanelli

Development and Characterization of Sensors and Electronics for the ATLAS High-Granularity Timing Detector

Speaker
Mei Zhao

MID: a muon detector for the ALICE 3 upgrade project

Speaker
Jesus Eduardo Munoz Mendez

Neutrino Polarizability and Single-Photon

Speaker
KIMY JOHANA AGUDELO JARAMILLO

Compact, Long-Range, and Vacuumless Defects in Flat and Warped Spacetimes

Speaker
Elisama Lima

NON-RELATIVISTIC ANALYSIS OF BOUND STATES IN QCD IN N-DIMENSIONAL SPACES AT FINITE TEMPERATURE

Speaker
Ms Carolaine Oliveira

Long-Lived Particles as a way of probing Super-WIMPs and the Re-heating Temperature at Colliders

Speaker
Paulo Areyuna

Optical Response and Veto Performance Simulation of the PoWER Prototype for DUNE Phase II

Speaker
Isabel Ribas

Development of an interactive ionizing radiation detector simulator for educational purposes

Speaker
Pedro Eduardo Gonçalves Oliveira

First Measurement of Charged Current Muon Neutrino Induced Kaon Production on Argon

Speaker
David Martinez Caicedo

Update on Standalone Geant4 Simulation Framework for the PoWER Photodetector in DUNE Phase II

Speaker
Luciana Hirsch

Test of the “Running Axial Mass” Model Using Accelerator Neutrino Data

Speaker
Игорь Kakorin

Plasmoid-Mediated Magnetic Reconnection in Magnetized Plasmas

Speaker
Johan Gabriel Cortes Valencia

Development and Testing of a Plastic Scintillator-Based Compact Test and Trigger System with SiPM Readout and Custom Electronics

Speaker
Prajjalak Chattopadhyay

TEMPERATURE-DEPENDENT OPTICAL PROPERTIES OF WAVELENGTH SHIFTERS USED UN HIGH-ENERGY PHYSICS EXPERIMENT

Speaker
Ana Paula Mendonça

Development of a Hodoscope for Testing and Characterization of WCD Detectors for SWGO

Speaker
Guilherme Ferreira Franco

Pile-up event reconstruction for enhanced energy resolution at liquid scintillator detectors

Speaker
chuang xu

The ATLAS Trigger Menu in the LHC Run 3

Speaker
Jean Yves Beaucamp

Performance and Background Mitigation of the Skipper-CCDs Multi-Chip Module in CONNIE

Speaker
Patrick Lemos

Effect of Invisible Neutrino Decay in DUNE

Speaker
DAVI DE ASSIS CAMARGOS

Impact of LIV Effects Induced by Quantum-Gravity–Motivated Modified Dispersion Relations on Neutrino Coherence Length

Speaker
Mr Luiz Paulo Accorsi do Vale

Light vector meson photoproduction in ultraperipheral heavy ion collisions at the LHC within the Reggeometric Pomeron approach

Speaker
Érison Rocha

Production of heavy-flavour particles and charmonia in pp collisions with PYTHIA

Speaker
Pedro Silva

Heavy and exotic hadron production at forward rapidities in high-energy proton-proton collisions

Speaker
Yuri do Nascimento Lima

Commissioning and Validation of the CMS HGCAL SiPM-on-Tile System

Speaker
Fabian Hummer

The ATLAS Tile Demonstrator Phase-II Upgrade Module in Run-3

Speaker
Stanislav Polacek

Upgrade of the ATLAS Thin Gap Chamber Electronics for HL-LHC

Speaker
Arisa Wada

Updated Bounds on the Minimal Left-Right Symmetric Model from LHC Dilepton Resonance Searches

Speaker
Mr Ricardo César Silva Rêgo

Time-over-Saturation correction method for scintillation signals in liquid argon detectors

Speaker
Maressa Pimenta Sampaio

USE OF A DIFFUSION CLOUD CHAMBER IN AN INTERACTIVE LECTURE DEMONSTRATION ON NUCLEAR RADIATION PHYSICS

Speakers
DANIEL MENDONÇA VASCONCELOS, David Goes Costa

News coverage of the LHC-CERN collaboration in Brazil

Speaker
Kelly Naomi Matsui

A Cryogenic Detector for CEvNS Searches at the ν-Angra Reactor Neutrino Experiment

Speaker
Mrs Ana Clara de Paula Moreira

Radiation-Induced Gas-Phase Modifications in Ar-CO_2 Mixtures Investigated in a Dedicated Degradation Chamber for Gaseous Detector Applications

Speaker
Willian Da Silva

Light Collection Uniformity of a Synchrotron Radiation Detector Based on a LYSO Crystal Matrix

Speaker
Marco Ayala

Now You See Me: Cosmic Rays — Portable Interactive Muon Detectors for Particle Physics Outreach

Speaker
Yuvaraj Elangovan

Cloud chamber: building a prototype using Peltier plates

Speaker
Cleide Matheus Rizzatto

Analysis of Inclusive Electron Neutrino Charged-Current Events in the SBND Experiment

Speaker
Laura Paulucci

Energy dependence of double parton scattering cross-sections for quarkonium and open-charm final states from $\sqrt{s}$ = 7 to 100 TeV

Speaker
Mapse Barroso Ferreira Filho

Constraining the parameter space of models with two or three SU(2) scalar multiplets using bounded-from-below conditions

Speaker
Darius Jurciukonis

Meson Mixing Bounds on Z' Mass in the Alignment Limit: Establishing the Phenomenological Viability of the 331 Model

Speaker
Patricio Escalona

Detailed simulation of the LHCb VELO pixel silicon sensors

Speaker
Pedro Nogarolli

Online monitoring of the LHCb VELO radiation damage

Speaker
Camila Belen Martinez

CERN-GIF++: unique facility for testing detectors in a realistic environment for LHC experiments and its upgrades

Speaker
Katherine Maslova Gioseffi Defante

Test and qualification of the service hybrids of the CMS Phase-II Outer Tracker for HL-LHC

Speaker
Miguel Gallo

Physics objects validation at the High-Level Trigger reconstruction in CMS

Speaker
Bruno Alves

Gas Flow Optimization for Environmental Robustness in GEM-based Detectors

Speaker
Daniel Neves Fachieri

Building a Repository for Physics Data Preservation

Speaker
Jiri Chudoba

Flavor-changing Freeze-In: Dark Matter indicates the scale of flavor violation

Speaker
Jacinto P. Neto

Exploring Neutrino Properties with an Extended Symmetry Model

Speaker
KIMY JOHANA AGUDELO JARAMILLO

Application of Machine Learning Algorithms to Simulated Collision Data in High Energy Physics

Speaker
Mauro Rogerio Cosentino

A search for dark photon at the Brazilian Synchrotron Light Source Laboratory

Speaker
Ms SILVIA ANGEL

Science and Art in High School Teacher Training: An Interdisciplinary Approach

Speakers
Mrs Amanda Schiavon Lisita, Mrs Isabella Galter Ivo

From Puzzles to Particles: A European Collaboration on Escape Rooms for Fundamental Physics Engagement

Speaker
Silvio Donato

From High-Energy Physics to the Classroom: A Low-Cost Muon Telescope with Coincidence Logic.

Speaker
Sandro Caetano de Oliveira

Global MaPSA Production and Testing for the CMS Phase-II Outer Tracker Upgrade: Status and Readiness for HL-LHC

Speaker
Leticia Braga Da Rosa

Run 3 E/gamma trigger performance

Speaker
Edmar Egidio Purcino De Souza

Efficiency Performance of the PoWER Photon Detector proposal for DUNE Phase II with LArSoft

Speaker
Thiago Cruz

Electromagnetic Shower Reconstruction Performance in ICARUS

Speaker
GABRIELI SALMORIA

9:00 PM

Sat, August 1

7:00 PM

Poster session: #2

Poster Session |
Location: Praiamar Natal Hotel & Convention, R. Francisco Gurgel, 33 - Ponta Negra, Natal - RN, 59090-050

Positron Emission Tomography with a liquid argon detector prototype

Speaker
Marina Reggiani Guzzo

Development of a Boron-coated THGEM-based Neutron Detector Prototype for Scalable and Cost-Effective Applications

Speaker
Mr Guilherme Lickel

The versatile TIGER chip: from HEP to X-ray imaging

Speaker
Federico Matias Melendi on behalf of the SPECTRE working group

Study of Dark Matter plus boosted Z/W±/h jet events in fully hadronic final states

Speaker
Matheus Costa Reis

Constraining Gamma-ray Lines from Dark Matter Annihilation using CTAO data

Speaker
Sabrina Brígida

Sensitivity of the photon-induced processes to the proton radius

Speaker
Mariola Klusek-Gawenda

IceCube and the astrophysics of cosmic multi-messengers

Speaker
Maria Briani Lima

Azimuthal anisotropy and collective flow in O+O and Ne+Ne collisions at $ \sqrt{s_{NN}}$ = 5.36 TeV with ATLAS

Speaker
Sebastian Julio Fuenzalida Garrido

Simplified models for resonant neutral scalar production with boosted Z to quarks and missing transverse energy final states

Speaker
Mr Miguel Lopes Cruz Rodriges

Detailed derivation of the 3P0 strong decay model applied to baryons

Speaker
Telmo Aguilar

ND280++ - an Upgraded Near Detector for the Hyper-Kamiokande Experiment

Speaker
Ewan Miller

Charmonium production in pO collisions at midrapidity with ALICE

Speaker
Luca Aguiar De Oliveira

Vertex activity study in νμCC0π interactions at the upgraded T2K near detector ND280

Speaker
Katharina Lachner

Mapping analytical probabilities for invisible neutrino decay and implications for DUNE, JUNO, and atmospheric experiments

Speaker
Alessandro Gusmão

Development of the Arapuca technology for hybrid Cherenkov and scintillation detectors for neutrino physics

Speaker
Prof. Ana Amelia Bergamini Machado

Neutrino scattering on electrons, nucleons and nuclei as a probe of neutrino electromagnetic interactions, neutrino spin oscillations and sterile neutrinos

Speaker
Artem Popov

Neutrino-Nucleus Scattering Simulation Using GENIE Event Generator

Speaker
Luiz Felipe Brandao Magalhaes Rodrigues

CMS Phase-2 Inner Tracker for the HL-LHC Upgrade

Speaker
Christine Angela McLean

Development and automation of module testing for the ATLAS HGTD upgrade

Speaker
Hendrik Smitmanns

New timing detectors for the CMS Precision Proton Spectrometer HL-LHC upgrade

Speaker
Valéria Vale

Calibration of GN2 jet-tagging algorithm using t¯t events from partial Run 3 pp collision data collected with the ATLAS detector

Speaker
Wonho Jang

Optimising ν_{μ} Charged-Current Event Selections at the DUNE Near Detector Complex.

Speaker
Eva Sabater Andres

Operational Experience with Multi-PMT Photosensors in a Water Cherenkov Test Experiment at CERN

Speaker
Mohit Gola

Study of RPC waveforms parameters and classification of signals using Machine Learning

Speaker
Dalmo Da Silva Dalto

Charge collection studies with Timepix4 at the Sirius Light source

Speaker
Mariah Clara Correa Barros F Pimentel

A Novel Lightguide for Glass Scintillators

Speaker
Jingbo Ye

Photon/neutron discrimination in the ReD+ experiment

Speaker
Pedro Zilves Maio Ventura

Micrometer-Precision Validation Bench for High Spatial Resolution Characterization of Scintillating Fibre (SciFi) Tracking Detectors

Speaker
Andre Massafferri Rodrigues

Search for Axions and Dark Photons Using Single Molecule Magnets

Speaker
Jose Roberto Alves Moura

AI Agents Can Already Autonomously Perform Experimental High Energy Physics

Speaker
Andrzej Novak

Studies with cosmogenic muons in the Skipper-CCDs of the CONNIE experiment

Speaker
Mauricio Sánchez Ramírez

Primary Vertex Reconstruction in sPHENIX: A Comparison of DCA-Based and Kalman Filter Approaches

Speaker
Adeeb Saed

Improving the sensitivity of the CONNIE experiment with convolutional neural networks

Speaker
Ana Carolina Oliveira

Neutrino spin oscillations in spatially inhomogeneous magnetic fields of realistic astrophysical objects

Speaker
Alexander Studenikin

Amplitude analyses of charm decays

Speaker
Gustavo Alejandro Loachamin Ordonez

Electroweak corrections in the determination of strong coupling from hadronic tau decays

Speaker
João Pedro Dalpino Dias

Measurement of the J/ψ Fragmentation Function in pp Collisions at $\sqrt{s} = 13.6$ TeV with ALICE

Speaker
Lucas Ferrandi

Data Structures and Algorithms for the Production of the ATLAS High-Granularity Timing Detector

Speaker
Annika Stein

Online Trigger Studies for ALICE FoCal

Speaker
Mauro Rogerio Cosentino

Calibration of the JMS in the CMS Experiment Using Boosted W Bosons and Top Quarks

Speaker
Julia Carvalho Leite

Performance and longevity of CO2-based mixtures in CMS Improved Resistive Plate Chambers in the HL-LHC environment

Speaker
Joao Pinheiro

Search for direct CP violation in multibody D meson decays

Speaker
Beatriz Moraes Vivacqua

Angular analysis of the B0 →K∗0(892)μ+μ−decay at √s = 13.6 TeV

Speaker
Mr Thiago De Andrade Rangel Monteiro

Search for a Doubly Charged Scalar at the LHC and FCC-hh

Speaker
Letícia Guedes

Search for dark matter produced in association with a dark Higgs boson decaying into a bottom quark pair in proton-proton collisions at sqrt(s) = 13 TeV with CMS

Speaker
Thiago Tomei Fernandez

LHCb VELO detector performance in LHC Run 3

Speaker
Victoria Ramos

Analysis of Particle Identification Performance Using Time-of-Flight for the Future ALICE 3 Detector

Speaker
Levi Louro Stahl

Development of a cosmic trigger system for CERN-GIF++

Speaker
Katherine Maslova Gioseffi Defante

Computational Optimization Strategies for DTL Cavity Design

Speaker
Eduardo Ferrari

Lossless handling of FOS data for ATLAS DCS

Speaker
Xola Gugulethu Mapekula

zfit: general likelihood model fitting in Python

Speaker
Raul Grande Quartieri

Leptonic Modeling of 57 HSP Blazars and Their Detectability with CTAO

Speaker
Vinícius Mendonça

Symplectic Realization of Generalized Snyder–Poisson Algebra

Speaker
Eduardo Lourenço Fabio de Lima

A Clifford algebraic derivation of the Standard Model

Speaker
Goncalo Quinta

Greisen Refinement Validated Against CORSIKA: Sub-5% Agreement for 20–800 GeV Gamma Showers at High Altitudes

Speaker
Constanza Viviana Valdivieso Castillo

Enhanced Greisen Formalism: Analytical Refinements and Zenith-Angle Dependence for Electromagnetic Air Showers

Speaker
Constanza Viviana Valdivieso Castillo

9:00 PM