



# ICHEP 2024

## Friday, 19 July 2024

### Poster Session 2: Poster Session 2 - Foyer Floor 2 (19:00 - 21:00)

[id] title	presenter	board
[412] From software to hardware: An easy guide to accelerate algorithms for the HL-LHC upgrades of CMS trigger system	LEGUINA, Pelayo	
[405] The LHCb Mighty Tracker	LIN, Tai-Hua	
[443] Final Performances for electron and photon calibration reconstruction and identification at ATLAS	BOUDET, Leo	
[693] Development of the Browser-based 3D Visualisation Approach for the ATLAS Outreach Applications	OLIVEIRA DAMAZIO, Denis	
[47] ATLAS ITk Production Database usage	WRAIGHT, Kenneth Gibb	
[45] Design and testing of photon-based hardware random number generator	BEZNOSKO, Dmitriy	
[691] Unique Properties of Daily Proton Fluxes up to 100 GV	FALDI, Francesco	
[788] Low Emittance Optics Design for CEPC Booster	Dr WANG, Dou	
[463] A Top Friendship: Measurement of ttH production in the H(bb) decay channel at ATLAS with Transformer Networks	TIAN, Yusong	
[588] Detector identifier and geometry management system in JUNO experiment	WU, Chengxin	
[521] Application of high energy physics detector description transformation for visualization in Unity	SONG, Tianzi	
[491] Event Visualization with Unity in BESIII experiment	LI, Jingshu	
[433] Data Quality Monitoring System for the JUNO Experiment	HUANG, Kaixuan	
[383] Constraining Majoron from Big-Bang Nucleosynthesis	Mr GANGULY, Sougata	
[1199] Differentiable Physics Emulator for Water Cherenkov Detectors	XIA, Junjie	
[1104] Shannon entropy for pp collisions at RHIC and LHC energies	ALVARADO GARCIA, Jesus Ricardo	
[1267] PrecisionSM: an annotated database for low-energy positron-electron hadronic cross sections	DRIUTTI, Anna	
[903] A data-driven method to estimate the antiproton background in Mu2e	CHITHIRASREEMADAM, Namitha	
[1131] Lepton Flavour Universality tests and determination of $V_{us}$ using the tau branching fractions fit	LUSIANI, Alberto	
[1338] NNLO fits of top-quark mass using total, single-differential and double-differential $t\text{-}\bar{t}+X$ cross-section data	GARZELLI, Maria Vittoria	
[1434] Challenging exclusive top quark pair production at low and high luminosity LHC	ERNANI MARTINS NETO, Daniel	
[509] Muon Momentum Calibration in ATLAS	PAZOS, Camila	
[1332] Trilinear Higgs Couplings in the THDMs and NTHDM at e+e- colliders	SCHIEBER, Daniel	
[1043] Status of Higgs-charm coupling measurements at CMS	DE COEN, Maarten	

[992] Searching for heavy neutral leptons through exotic Higgs decays at the ILC	THOR, Simon	
[1005] Discernible NSI effects in Long-baseline Neutrino Experiments	GIRI, Anjan	
[1013] Anticipation of the discovery potential sensitivity of next-generation neutrinoless double beta decay experiments	Dr SINGH, Manoj Kumar	
[1020] DUNE'S LOW ENERGY PHYSICS SEARCHES	MANTHEY CORCHADO, Sergio	
[1022] Measurements of a Total Inelastic K+-Argon Cross Section at ProtoDUNE-SP	DIURBA, Richard	
[1063] Status of ProtoDUNE-II	MANZANILLAS VELEZ, Luis Alberto	
[1089] The photo-detection system and double calorimetry in DUNE	BRUNETTI, Giulia	
[1097] Neutrino flux simulation for T2K using GEANT4	DASGUPTA, Pingal	
[1107] Pion-argon and proton-argon inclusive cross-section measurement using ProtoDUNE-SP 1 GeV beam data	LIU, Yinrui	
[1112] Demonstrating MeV-Scale Physics Capabilities of Large Neutrino LArTPCs with Ambient Blip Activity in MicroBooNE	ANDRADE, Diego	
[1118] Online Event Classification in JUNO	ZHANG, Yongpeng	
[1128] Measurement of cosmic muon flux and cosmogenic neutron production at CJPL	ZHANG, xinshun	
[1140] The Intermediate Water Cherenkov Detector for the Hyper-Kamiokande long-baseline neutrino oscillation program	AKUTSU, Ryosuke	
[1169] 1-ton Prototype Neutrino Detector Upgrade at CJPL-I	YANG, Yuzi	
[1170] Status of the NUCLEUS experiment	GIAMMEI, Marco	
[1189] Quantum Spread Complexity in Neutrino Oscillations	Dr DIXIT, Khushboo	
[1223] Observation and Reconstruction of Antiproton Annihilation at Rest in LArIAT	BASQUE, Vincent	
[1232] Achievement in Beam Power Records for the NOvA Target System	YONEHARA, Katsuya	
[1247] Likelihood and Deep Learning Analysis of the electron neutrino event sample at Intermediate Water Cherenkov Detector (IWCD) of the Hyper-Kamiokande experiment	Ms MONDAL, Tanima	
[1248] Sensitivity studies for a next-generation neutrino-mass experiment using tritium $\beta$ -decay	HEYNS, Svenja	
[1256] Low-Energy Calibration of the Hyper-Kamiokande Detector Utilizing a Deuterium Tritium Neutron Generator	Mr ER-RABIT, Rafik	
[1334] Interpreting Reactor Antineutrino Anomalies	Ms EL ATMANI, Ilham	
[1427] Light sterile neutrinos and implications on mass variables	Mr PAN, Supriya	
[942] Search for low mass vector and scalar resonances decaying into quark-antiquark pairs in proton-proton collisions using the full CMS Run 2 dataset	KRUPA, Jeffrey	
[943] The search for $K_L \rightarrow \pi^0 \pi^0 X$ , $X \rightarrow \gamma \gamma$ in the KOTO experiment	REDEKER, Joseph	
[1049] Search for single production of vector-like top partner $T \rightarrow H^{+} b$ and $H^{\pm} \rightarrow t \bar{b}$ at the HL-LHC	BERROUJ, Mbark	
[1198] SM fermion scattering off electric charge and CP-violating domain walls in the 2HDM	Prof. MOORTGAT-PICK, Gudrid	

[1308] Search for new light bosons with the KATRIN experiment	LAUER, Joscha	
[1372] Probing $\tau$ lepton dipole moments at future Lepton Colliders	WANG, Zeqiang	
[1038] The LHeC: Basic Concepts and Layout of the Machine	ANDRE, Kevin	
[1085] Diagnostics of the MeV level LWFA electron bunches stability at 1kHz repetition rate	ZYMAK, Illia	
[1126] The CEPC radiation protection issues	TANG, Guangyi	
[1264] Extraction scheme for future CEBAF FFA based energy upgrade	KAZIMI, Reza	
[1446] Neutralina: promoting science and gender-equality in Latin-America	COLL SARAIVIA, Lucia Ximena	
[1095] What is a particle?	Dr MELO, Ivan	
[1439] Underwater Muon Detection System to Measure Coastal Mixed Layer Depth for Ocean and Climate Studies	KORKMAZ, Muhtesem Akif	
[1381] A virtual platform for remote surveillance, intervention planning and real-time feedback in research facilities	LOHWASSER, Kristin	
[922] Characterization of the First Full Scale HYLITE, an XFEL Pixel Detector Readout Chip	LI, Mujin	
[904] Visualization aided physics analysis in BESIII experiment	YOU, Zhengyun	
[960] Cluster counting algorithm with machine learning for drift chamber	ZHAO, Guang	
[1017] ChatQCD: Let Large Language Models Explore QCD	SULC, Antonin	
[1018] Revealing Connections in QCD with Machine Learning	CONNOR, Patrick	
[1206] Proton Decay Identification in DUNE with Multimodal Machine Learning Fusion Techniques	GULA GARTMAN, Anna	
[1272] The Analysis Description Language Ecosystem: Latest developments and physics applications	SEKMEN, Sezen	
[1326] Masked image modeling for image completion on simulated calorimeter data	JARUSKOVA, Kristina	
[1064] Trigger Primitive Generation using FELIX FPGA system: A Case Study for DUNE	EARLE, Antony Daniel HRISTOVA, Ivana MANOLOPOULOS, Konstantinos	
[1079] DRS4 based SiPM readout system for the cosmic muon veto detector	MAJUMDER, Gobinda	
[1154] Simulations of the calorimetry system for the ALLEGRO FCC-ee detector concept	SOPKOVA, Filomena	
[1191] First look at particle flow in LAr calorimeter using Pandora in Key4hep framework	SASIKUMAR, Swathi	
[1214] Energy and timing resolution boost with waveform analysis	WANG, Yuyi	
[1294] Fast algorithm for 3D online spectrum and hit position reconstruction in segmented semiconductor detectors based on analytical model of charge collection dynamics	Dr JAKUBEK, Jan	
[1382] Optimized SiPM array readout for scintillation detectors at High Energy Future Facilities	SÝKOROVÁ, Silvia	
[961] Development of Upstream Tracker using MAPS for the LHCb Upgrade II	LI, Yiming	
[975] Pileup Mitigation at CMS Level-1 Trigger for the HL-LHC	PATIL, Mandakini Ravindra	
[983] Innovative silicon timing sensors for the future ALICE 3 experiment	COLOCCI, Manuel	

[1026] Level-1 Trigger monitoring system in the CMS experiment	JAISWAL, Atul	
[1087] Mass aware jet clustering with Variable-R and a soft drop veto	BENECKE, Anna	
[1092] Performance of the DUNE Cryogenic Charge Readout Electronics in ProtoDUNE-II	HUANG, Roger Guo	
[1225] Level 1 Muon Triggers for the CMS Experiment at the HL-LHC	KUSMIERSKI, Jakub Piotr	
[1241] Searches for long-lived particles with ANUBIS: first commissioning results from proANUBIS	REVERING, Michael	
[1378] The DAQ system development for the T2K new near detector Super-FGD	ARIMOTO, Shunta	
[972] Charge ratio of cosmic muon spectrum at Madurai, India	CHATTOPADHYAY, Prajjalak	
[1081] A realistic coalescence model for (anti)nuclei production	HORST, Maximilian	
[1141] Effect of thermal fluctuations on dark matter annihilation cross section	BUTOLA, Prabhat	
[1175] The multi-PMT Optical Module of KM3NeT	Dr REA, Immacolata Carmen	
[1179] The development of a demonstrator of the Penetrating Particle Analyzer for space missions	JELINEK, Jindrich	
[1301] Thermal effects in CPT and unitarity constraints for higher-order CP asymmetries	ZAUJEC, Viktor	
[1435] Cosmological implications of inflaton-mediated dark and visible matter scatterings after reheating	Mr GOPE, Sourav	
[920] Radio-impurity studies for dark matter detection with the SABRE South experiment	Dr SLAVKOVSKA, Zuzana	
[1352] Cosmic-ray-boosted dark matter in direct detection and neutrino experiments	KOLEŠOVÁ, Helena	
[937] Transverse momentum distributions of Charm Meson in Relativistic Heavy-Ions Collisions studied through Non-Extensive Statistics	GAMEIRO MUNHOZ, Marcelo	
[991] Machine learning approach for studying dielectrons in LHC Run 3 data with ALICE	SAMITZ, Daniel	
[1036] Event-by-event investigation of the two-particle source function with EPOS	KOVÁCS, László	
[1053] Status of D-meson measurements in pp collisions at $\sqrt{s} = 13.6$ TeV and Pb-Pb collisions at $\sqrt{s_{\text{NN}}} = 5.36$ TeV with ALICE	TAVIRA GARCIA, Andrea	
[1105] Study of the criticality for QGP formation in AA and pp collisions	ROSALES HERRERA, Diana	
[1221] Comparison of the $\mathbf{\pi}^{\text{pm}}\mathbf{K}^{\text{pm}}$ femtoscopy in Pb-Pb collisions at $\sqrt{s_{\text{NN}}} = 5.02$ TeV modeled with (3+1)D hydrodynamics + THERMINATOR 2 and iHKM	Dr CHAKRABORTY, Pritam	
[1341] Differential Study of $\Lambda$ -hyperon Polarization in Central Heavy-Ion Collisions Within Transport Model Approach	Mr VITIUK, Oleksandr	
[979] Global QCD analysis of diffractive parton distribution function considering higher twist corrections within the xFitter framework	SALAJEGHEH, Maral KHANPOUR, Hamzeh HASHAMIPOUR, Hadi	
[1006] Jet origin identification for the high energy frontier	RUAN, Manqi	
[880] Data-driven dilepton background estimation improvements for the Drell-Yan analysis at CMS	AMBROZAS, Marijus	
[535] Integration of the ACTS track reconstruction toolkit in the ATLAS software for HL-LHC operations	HASAN, Rosanne Zara	
[564] Turning noise into data: using pileup for physics	PIRTTIKOSKI, Antti	

[573] Data Quality Control of the ALICE Inner Tracking System in the LHC Run 3	KUSHPIL, Svetlana	
[577] Performance of eco-friendly alternative gas mixtures in CMS iRPC detector in the HL-LHC environment	PINHEIRO, Joao	
[583] Latest results of longevity studies on the present CMS Resistive Plate Chamber (RPC) system for the HL-LHC phase	FONSECA DE SOUZA, Sandro	
[723] Production and quality control for the CMS iRPC	DE JESUS DAMIAO, Dilson	
[614] In-beam charged particle detector using 0.2-mm thick plastic scintillator for the J-PARC KOTO experiment	ONO, Keita	
[625] Scintillating sampling ECAL technology for the LHCb PicoCal	ZHANG, Chenjia	
[741] ### Development of the ATLAS Liquid Argon Calorimeter Readout Electronics for the HL-LHC	BARILLARI, Teresa	
[754] Performance of CMS Level-1 Trigger Data Scouting during LHC Run 3	GIORGETTI, Sabrina	
[834] The Muon Identifier detector for the ALICE 3 experiment	ROJAS TORRES, Solangel	
[859] Status of the Liquid Scintillator for JUNO	XIE, Yuguang	
[803] Long-lived particle searches with the ILD experiment	ZARNECKI, Aleksander	
[892] W boson mass in gauge-Higgs unification	ORIKASA, yuta	
[510] Enhancing Prompt Lepton Identification: Development and Optimization of the PLIT Tagger	MARICIC, Ema	
[630] Open Data at ATLAS: Bringing TeV collisions to the World	VIVAS ALBORNOZ, Mariana Isabel	
[883] Long-standing challenges and latest developments in the generation of SMEFT predictions within the Top Sector	BELVEDERE, Alberto	
[681] Liquid-based micro-channeling for efficient FPGA cooling	COCCARO, Andrea FRANCAVILLA, Paolo	
[757] Search for heavy scalar resonances in the 4-lepton final state in the CMS experiment	LIU, Geliang	
[595] Studies of rare Higgs decay $H \rightarrow Z\gamma$ in CMS at $\sqrt{s} = 13$ TeV	CHOU, Yu-Hsuan	
[687] Deep Learning applied to VBF Higgs Boson in the $\overline{b}$ channel: a study of Neural Networks impact on High Energy Physics analysis	BRIANTI, Greta	
[732] Long-lived particles from exotic Higgs decays at the FCC-ee	GALLEN, Axel	
[1514] Observation of Entangled Top Quarks at the LHC measured with the CMS Detector at $\sqrt{s} = 13$ TeV	WILDRIDGE, Andrew	
[697] Broadening the Spectrum of Available States: Promoting Diversity in Physics in the LGBTQ+ Context	BONILLA, Johan	
[1518] Neutron skin- calculations for Pb+Pb, proton+Pb, antiproton+Pb at $p \sim 1$ AGeV (and higher momentum) collisions.	PALCZEWSKI, Michal	
[1516] ATLAS search for ALPs that decay into diphoton in Run 3	IRWIN, Rebecca Katie	
[1517] Modern amplitude methods for simple processes in QED.	PODIVÍN, David	
[1449] Celestial amplitudes for Goldstone bosons and soft theorems	VASKO, Petr	
[1193] Collinearly Enhanced YFS MC Approach to Precision High Energy Collider Physics	WARD, B.F.L. WARD, Bennie	
[1455] Precision Predictions for Polarized Electroweak Bosons	PONCELET, Rene	
[1456] Prospects of searches for excited neutrinos at the LHC	MARTINOVICOVA, Gabriela	

<b>[1452] Failure of the Baym-Kadanoff construction to consistently match quantum dynamics with thermodynamic critical behavior</b>	KOS, Simon -	
<b>[1450] Subthreshold parameters of ppi scattering revisited</b>	KOLESAR, Marian	
<b>[1454] Nanosecond AI for anomaly detection with decision trees on FPGA</b>	HONG, Tae Min	
<b>[1505] Testbeam performance of ALTIROC3 hybrid assemblies with LGAD sensors for the ATLAS HGTD Upgrade</b>	YANG, Xiao	
<b>[753] Searches for Beyond the Standard Model Higgs bosons in fermionic final states within CMS</b>	LEYVA PERNIA, Daina	
<b>[1207] Highly granular hadronic calorimeter with scintillating glass tiles: R&amp;D overview and highlights</b>	LIU, Yong	