



# Annual Meeting of the Swiss Physical Society 2024

## Tuesday 10 September 2024

### Nuclear, Particle- & Astrophysics (TASK): I: Detector and Performance I - ETA F 5 (14:00 - 16:00)

time	[id] title	presenter
14:00	[35] □301□Tests and results of the power components of the ATLAS Inner Tracker detector readout system.	MOLLIER, Lucas
14:15	[39] □302□Performance tests of the ATLAS Inner Tracker Pixel detector opto-electrical conversion system	GLAZEWSKA, Marianna
14:30	[46] □303□Data transmission tests of the ATLAS Inner Tracker Detector opto-electrical conversion system.	ALBERTI, Una Helena
14:45	[193] □304□Timing measurement ASIC using LGAD for possible HL-LHC upgrade	GHIMOUZ, Abderrahmane
15:00	[33] □305□Radiation hardness and annealing, strategies for space application of silicon photomultiplier technologies on a quasi-polar LEO orbit	DAVARPANAHA, Shideh
15:15	[110] □306□CMS ECAL on-detector readout electronics radiation tests	HÄRRINGER, Nico
15:30	[181] □307□TEPX Detector for the CMS Inner Tracker Upgrade: Module Production Status and Plans	SAMALAN, Amrutha
15:45	[70] □308□MONOLITH - picosecond capability in a high granularity monolithic silicon pixel detector	Mr MILANESIO, Matteo

### Nuclear, Particle- & Astrophysics (TASK): II: Detector and Performance II - ETA F 5 (16:30 - 18:30)

time	[id] title	presenter
16:30	[91] □311□Production and Qualification of the Vertex Detector for the Mu3e Detector	SENGER, Thomas Christian
16:45	[186] □312□Construction and Commissioning Status Report on Mu3e Experiment	WANG, Yifeng
17:00	[55] □313□Cryogenic Characterization of Neutron-Irradiated SiPMs	CURRAS RIVERA, Esteban
17:15	[123] □314□The Outer Detector of the LUX ZEPLIN dark matter direct detection experiment	Mr BIRCH, Harvey
17:30	[160] □315□Outer Detector Energy Calibration of the LUX-ZEPLIN Experiment	HERNANDEZ, Miguel
17:45	[151] □316□Results from low temperature wafer-wafer bonded pad-diodes for particle detection	WÜTHRICH, Johannes Martin

# Wednesday 11 September 2024

## Nuclear, Particle- & Astrophysics (TASK): III: Low Energy I - ETA F 5 (14:30 - 16:30)

time	[id] title	presenter
14:30	[64] □321□The n2EDM experiment - A search for new physics at the precision frontier	CHEN, Wenting
14:45	[29] □322□An Active Magnetic Shield for the n2EDM Experiment - Simulation and Optimization	ERMAKOV, Sergey
15:00	[43] □323□An efficient spin transport system for ultracold neutrons in the n2EDM experiment	CARATSCH, Gian Luca
15:15	[1] □324□A high-sensitivity Cesium magnetometer array for the n2EDM experiment	KLETZL, Victoria
15:30	[78] □325□The muEDM experiment at PSI	HÖHL, David
15:45	[295] □326□Preliminary Results for the Injection Studies at Low Magnetic Fields for the muEDM Experiment	SANZ BECERRA, Diego Alejandro
16:00	[25] □327□Muonic Atom Spectroscopy of $^{238}\text{U}$	DOINAKI, Anastasia

## Nuclear, Particle- & Astrophysics (TASK): IV: Low Energy II - ETA F 5 (17:00 - 18:30)

time	[id] title	presenter
17:00	[34] □331□Measurement of the X17 anomaly with the MEG II detector	DAL MASO, Giovanni
17:15	[61] □332□Results of the neutron to mirror-neutron oscillations at PSI	ZIEHL, Nathalie
17:30	[16] □333□High-Resolution Spectroscopy of Muonic Lithium - First Steps and Prospects of the QUARTET Experiment	VON SCHOELER, Katharina
17:45	[156] □334□Radiative corrections and Monte Carlo tools for low-energy $e^+e^-$ experiments	KOLLATZSCH, Sophie
18:00	[208] □335□Probing neutrinoless double beta decay with LEGEND	REMESAN SREEKALA, Aravind

## Nuclear, Particle- & Astrophysics (TASK): V: Physics at LHCb - ETZ E 7 (17:00 - 19:30)

time	[id] title	presenter
17:00	[82] □341□Heavy flavour spectroscopy at LHCb	CRAIK, Daniel Charles
17:15	[197] □342□Measurement of the branching ratio of $B^+ \rightarrow K^+ \pi^+ \pi^- \mu^+ \mu^-$ at LHCb	KAUNISKANGAS, Anni
17:30	[144] □343□Search for the $B_s^0 \rightarrow \mu^+ \mu^- \gamma$ decay with photon conversions	Mr VAN LAAK, Raphael
17:45	[101] □344□Measurement of $BR(B_s \rightarrow K_S K_S)$ with Run 2 LHCb data	GUSEINOV, Kerim
18:00	[3] □345□Search for $K^0 \rightarrow \pi^+ \pi^- \mu^+ \mu^-$ decays with the Run II LHCb data	Dr GARCIA MARTIN, Luis Miguel
18:15	[19] □346□Search for violation of leptonic universality in Semileptonic Hyperon Decays in LHCb	BREA RODRIGUEZ, Alexandre
18:30	[30] □347□Search for the $B_{(c)}^+ \rightarrow \tau^+ \nu_{(\tau)}$ decay at LHCb	DE SOUSA ATAIDE DA SILVA, Rita

18:45	[56] □348□Search for axion-like particles at LHCb	ANDREOLA, Pasquale
19:00	[229] □349□BDF/SHiP at the SPS ECN3 high-intensity beam facility	FERRILLO, Martina

# Thursday 12 September 2024

## Nuclear, Particle- & Astrophysics (TASK): VI: Machine Learning - ETA F 5 (14:00 - 16:30)

time	[id] title	presenter
14:00	[104] □351□Machine Learning Methods for Top Reconstruction using the ATLAS Experiment	Mr DAL SANTO, Daniele
14:15	[86] □352□Anomaly detection techniques for ATLAS calorimeter data quality monitoring	ČEPAITIS, Vilius
14:30	[66] □353□Pileup for physics: building a novel hadronic physics dataset	MORENO MARTINEZ, Carlos
14:45	[67] □354□Mitigating experimental challenges in using pileup for physics	ALVES CARDOSO, Mario
15:00	[68] □355□Extracting the jet energy resolution from pileup collisions	PIRTTIKOSKI, Antti
15:15	[13] □356□Machine Learning in $b \rightarrow s$ II	AEBISCHER, Jason
15:30	[165] □357□Leveraging transformers and RL to identify key b-hadron backgrounds	HIJANO MENDIZABAL, Guillermo
15:45	[41] □358□Towards an AI-based trigger system for the next-generation of imaging atmospheric Cherenkov telescope cameras	MIENER, Tjark
16:00	[59] □359□Deep Learning-Based Data Processing in Large-Sized Telescopes of the Cherenkov Telescope Array: FPGA Implementation	ABELLAN BETETA, Carlos
16:15	[296] □360□Neutrino interaction classification in SND@LHC based on Graph Neural Network	YANG, Zhibin

## Nuclear, Particle- & Astrophysics (TASK): VII: New physics searches at CERN - ETA F 5 (17:00 - 19:00)

time	[id] title	presenter
17:00	[232] □361□Search for Axion-Like Particles in Photonic Final States with the FASER Detector at the LHC	TARANNUM, Noshin
17:15	[75] □362□LHC Neutrinos at FASERnu and Neutrino Energy Reconstruction Methods	ATKINSON, Jeremy
17:30	[81] □363□Exploring the hadronic landscapes, a novel search in multijet Events at the ATLAS Experiment	KONTAXAKIS, Pantelis
17:45	[99] □364□Search for Top Squark Pair Production with zero Lepton Final States using ATLAS Run 3 Data	SCHEFER, Meinrad Moritz
18:00	[28] □365□Growing Evidence for a Higgs Triplet at the LHC	BANIK, Sumit
18:15	[2] □366□New Higgses at the Electroweak Scale	COLORETTI, Guglielmo
18:30	[93] □367□Recent results from the NA62 experiment at CERN SPS	CHANG, Xiafei

# Friday 13 September 2024

## **Nuclear, Particle- & Astrophysics (TASK): VIII: Astroparticle physics and Dark Matter - ETA F 5 (13:30 - 15:30)**

time	[id] title	presenter
13:30	[212] □371□Search for gamma-ray spectral lines from dark-matter annihilation with the DAMPE satellite	FRIEDEN, Jennifer Maria
13:45	[226] □372□MiniFIT, The Small-Scale Version of the HERD Tracking System, From Design to Performance	Dr PERRINA, Chiara
14:00	[47] □373□Terzina Telescope: Pioneering the Detection of Cherenkov Light from Extensive Air Showers in Space	Ms D'ARCO, Martina
14:15	[65] □374□A comprehensive study of muons detected by the Large-Sized Telescope during its commission phase.	VOITSEKHOVSKYI, Vadym
14:30	[45] □375□The next generation cameras for the Large-Sized Telescopes of the Cherenkov Telescope Array Observatory	Dr BURMISTROV, Leonid
14:45	[209] □376□Testing gravity through the distortion of time	CASTELLO, Sveva
15:00	[297] □377□Latest results from the XENONnT dark matter experiment	CIMENTAL CHAVEZ, Paloma
15:15	[298] □378□XLZD: The Future of Direct Dark Matter Detection	ADROVER, Maximinio