

## **Session Program**

**Jul 6 - 13, 2022**



# **ICHEP 2022**

## ***Poster Session***

Bologna, Italy  
Palazzo della Cultura e dei Congressi

# Fri, July 8

7:05 PM

## Poster Session

**Poster Session** | **Location:** Bologna, Italy, Palazzo della Cultura e dei Congressi

**Search for Dark Matter produced in association with a Standard Model Higgs boson decaying to b-quarks using the full Run 2 collision data with the ATLAS detector**

**Speaker**

Anindya Ghosh

**A Search of Dark Tridents Using the MicroBooNE Detector**

**Speaker**

Luis Mora

**Low Radioactive Material Screening and Background Estimation for the PandaX-4T Experiment**

**Speaker**

Mengmeng Wu

**Searching for Dark Matter in top quark production with the CMS experiment**

**Speaker**

Dominic Stafford

**Single pion production in muon-electron scattering at MUonE**

**Speaker**

Clara Lavinia Del Pio

**Multi-dimensional measurements of parton shower in pp collisions at RHIC**

**Speaker**

Monika Robotková

**Hyperon physics at BESIII**

**Speaker**

Liang Liu

**Measurement and QCD analysis of inclusive jet production in deep inelastic scattering at ZEUS**

**Speaker**

Florian Lorkowski

**The effect of light sea quark symmetry breaking on polarized nucleus and sum rules**

**Speaker**

Fatemeh Arbabifar

**NNLO charmed-meson fragmentation functions and their uncertainties in the presence of meson mass corrections**

**Speaker**

Maral Salajegheh

**Observation of new charmonium decays at BESIII****Speaker**

Yong Xie

**Vacuum phenomenology of the spin-2 and -3 mesons****Speaker**

Shahriyar Jafarzade

**Classification of hadron candidates with Machine Learning****Speaker**

Łukasz Bibrzycki

**Jet flavour tagging at FCC-ee****Speaker**

Kunal Gautam

**Light Meson decays at BESIII****Speaker**

Francesca De Mori

**The Strong2020 and Radio MonteCarLow activities****Speaker**

Anna Driutti

**Soft photon bremsstrahlung at Next-to-Leading Power****Speaker**

Domenico Bonocore

**Impact of production mechanism of the enigmatic  $X(3872)$  on its structure****Speaker**

Antoni Szczurek

**Partial wave analysis of the  $\tau \rightarrow 3\pi \nu_\tau$  decay at Belle****Speaker**

Mr Andrei Rabusov

**Unbinned Angular Analysis of  $B \rightarrow D^{(*)}(D\pi)\ell\nu$  Decay and  $C_{V_R}$** **Speaker**

Zhuoran Huang

**New physics sensitivity in  $\Lambda_b \rightarrow \Lambda^{(*)}\mu^+\mu^-$  and  $\Lambda_b \rightarrow \Lambda^{(*)}\nu\bar{\nu}$  baryonic decays****Speaker**

Nilakshi Das

**Reconstructing parton collisions with machine learning techniques****Speaker**

Dr German Sborlini

**SMEFT probes of new physics in top spin measurements****Speaker**

Claudio Severi

**Search for non-Standard Model interactions of the top quark at ILC****Speaker**

Dr Adrian Irlles

**Recent results of Baryon electromagnetic form factors at BESIII****Speaker**

Francesca De Mori

**Automated NLO SM corrections for all colliders****Speaker**

Pia Bredt

**Performance of heavy flavor jet tagging in CMS****Speaker**

Soureek Mitra

**Machine learning applications in PMT waveform analysis****Speaker**

Qi Wu

**An NTuple production service for accessing LHCb Open Data: the NTuple Wizard****Speaker**

Ryunosuke O'Neil

**Qualitative assessment of the interest in science by high school students who participated in the Italian Masterclasses during, before and after the Covid-19 pandemic.****Speaker**

Cristiano Tarricone

**AggiornaMenti: an INFN project for the education of junior high school science teachers****Speaker**

Viviana Fanti

**ATLAS Virtual Visits - Bringing the world to our detector****Speaker**

Giulia Manco

**A new ATLAS Visitor Centre****Speaker**

Giuseppe Carratta

**Increasing Multilingualism in ATLAS' Science Communication****Speaker**

Wasikul Islam

**Building a nuclear physics lab in the 21st century****Speaker**

Dr Stefano Carsi

**The Laser-hybrid Accelerator for Radiobiological Applications (LhARA)**

**Speaker**  
Kenneth Long

### **GEANT4 Simulation Package for Interactions Related to MuonicAtom and Muon-Catalyzed Fusion**

**Speaker**  
Dr Sridhar Tripathy

### **Status of the CSM FPGA Irradiation Test for the HL-LHC ATLAS Muon Spectrometer Upgrade**

**Speaker**  
Jem Guhit

### **The Pixel Luminosity Telescope: a silicon sensor detector for luminosity measurement at CMS**

**Speaker**  
Nimmitha Karunarathna

### **The ATLAS New Small Wheel Simulation and Reconstruction Software and Detector Performance Studies**

**Speaker**  
Stylios Angelidakis

### **Upgrade of the Drift Tube (DT) Muon System for the CMS Detector at the HL-LHC**

**Speaker**  
Muhammad Bilal Manzoor Kiani

### **Data Monitoring of the ATLAS Muon System and Commissioning of the New Small Wheel DQ System**

**Speaker**  
Sandeep Kaur

### **The CMS GEM alignment with a new back-propagation method**

**Speaker**  
Hyunyoung Kim

### **Testbeam studies of irradiated modules for the ATLAS ITk Strip upgrade**

**Speaker**  
Jonas Steentoft

### **Radiation-Hard Silicon Strip Sensors for the ATLAS Phase-2 Upgrade**

**Speaker**  
Urmila Soldevila Serrano

### **The new ATLAS triggers for long-lived particles that leave unconventional signature in the tracking detectors**

**Speaker**  
Ismet Siral

### **Level 1 trigger in the CMS barrel muon chambers during HL-LHC**

**Speaker**  
Carlos Vico

### **Performance and Improvements of the ATLAS Level-1 Muon Trigger for Run 3**

**Speaker**

Yuichiro Hayashi

**The new Muon-to-Central-Trigger-Processor Interface at ATLAS****Speaker**

Yoav Afik

**Performance of the ATLAS missing transverse momentum trigger for Run 3****Speaker**

Bryan Kortman

**Production and quality control of the GEM GE2/1 detector for the upgrade of the CMS endcap muon system****Speaker**

Mi Ran Kim

**Probe for Luminosity Measurement at LHCb****Speaker**

Eugenia Spedicato

**The new ODMB for the Phase II upgrade of the CMS endcap muon system****Speaker**

Hualin Mei

**Measurement of silicon-sensor prototypes for the CMS High-Granularity Calorimeter Upgrade for HL-LHC****Speaker**

Chaochen Yuan

**Vacuum stability and scalar masses in the superweak extension of the standard model****Speaker**

Zoltán Péli

**Constraints on lepton-flavor-violating scalar portal using the Belle II result in the search for  $\{e^+ \} \{e^- \} \to \{e^+ \} \{\mu^+ \} + \{\text{invisible}\}$  with  $\{\mathcal{L}\} = 276 \text{ fb}^{-1}$** **Speaker**

Lam Thi To Uyen

**Multicritical Point Principle and Its Phenomenology****Speaker**

Kei Yagyu

**Cover all your Bases: Asymptotic Distributions of the Profile Likelihood Ratio in Quadratic Wilson Coefficient Fits****Speaker**

Florian Bernlochner

**SWSM phenomenology****Speaker**

Zoltan Trocsanyi

### **Hitting two BSM particles with one lepton-jet: search for a top partner decaying to a dark photon, resulting in a lepton-jet**

**Speaker**

Sukanya Sinha

### **Background study for Korea Experiments on Magnetic Monopole**

**Speaker**

Mr Changgi Huh

### **Constraining the Gauged $U(1)_{L_{\mu-L_{\tau}}}$ Model by Supernova Neutrino Observation**

**Speaker**

Mr Chun Sing Jason Leung

### **Neutrinoless double beta decay in the type-I seesaw model**

**Speaker**

Yufeng Li

### **Electromagnetic Energy Reconstruction in ProtoDUNE**

**Speaker**

Aleena Rafique

### **Complete one-loop matching of the type-I seesaw model onto the Standard Model effective field theory**

**Speaker**

Di Zhang

### **Background measurements and detector response studies for ISMRAN experiment.**

**Speaker**

Roni Dey

### **Neutrino oscillation parameter determination at INO-ICAL using track and hit information from GEANT**

**Speaker**

Jaydeep Datta

### **Neutrino phenomenology, $(g-2)_{\mu, e}$ with $U(1)$ gauge symmetries in inverse seesaw framework**

**Speaker**

Papia Panda

### **Overview of neutrino electromagnetic properties**

**Speaker**

Alexander Studenikin

### **CRAB: Calibration of bolometers for nuclear recoils at the 100 eV scale using neutron capture**

**Speaker**

Mrs Gabrielle SOUM

### **Non-unitary Leptonic Flavor Mixing and CP Violation in Neutrino-antineutrino Oscillations**

**Speaker**  
Yilin Wang

### **Neutrino Phenomenology and Leptogenesis in type-III Seesaw under $A_4$ Modular symmetry**

**Speaker**  
Priya Mishra

### **Hadron-argon Cross Section Measurements in ProtoDUNE**

**Speaker**  
Heng-Ye Liao

### **Sterile Neutrino and Dipole Portal Explanations of the MiniBooNE Excess**

**Speaker**  
Nicholas Kamp

### **Status of the search for ${}^{48}\text{Ca}$ double beta decay with CANDLES**

**Speaker**  
Dr Yuto Minami

### **Required Exposure and Background Levels in the Searches of Neutrinoless Double- $\beta$ Decay**

**Speaker**  
Dr Manoj Kumar Singh

### **The Discovery Power of Future Neutrinoless Double Beta Decay Experiments**

**Speaker**  
Mr Manuel Ettengruber

### **Annual modulation from COSINE-100 data using DAMA/LIBRA's analysis technique**

**Speaker**  
Dr Hafizh Prihtiadi

### **The CYGNO experiment**

**Speaker**  
Rita Antonietti

### **Dark Matter Decay to Neutrinos**

**Speaker**  
Diyaselis Delgado

### **Search for a massless dark photon in $KL \rightarrow \gamma + \text{dark photon}$ at the KOTO experiment**

**Speaker**  
Tong Wu

### **Towards Understanding the Origin of Cosmic-Ray Electrons**

**Speaker**  
cheng zhang

### **A Dark Matter WIMP That Can Be Detected and Definitively Identified with Currently Planned Experiments**

**Speaker**  
Roland Allen

**Prospects and challenges for dark sectors with heavy fermions****Speaker**

Navin McGinnis

**Study of cosmic antideuterons with the Alpha Magnetic Spectrometer on the ISS****Speaker**

Senquan LU

**Testing quantum photosensors for the BREAD experiment****Speaker**

Kristin Dona

**Coalescence afterburner for antinuclei production in hadronic collisions with input from PYTHIA8****Speaker**

Mattia Di Mauro

**Searches of small mass WIMPs at PandaX experiment****Speaker**

Ning Zhou

**Search for new physics in rare heavy-flavor decays at CMS****Speaker**

Caterina Aruta

**SM theoretical predictions for  $B^0 \rightarrow \phi \ell^+ \ell^-$  decay****Speaker**

Irina Parnova

**Electromagnetic dipole moments of the  $\tau$ -lepton at the ILC and CLIC****Speaker**

Dr María A. Hernández-Ruiz

**Strong decay widths and mass spectra of charmed baryons****Speaker**

Andres Ramirez Morales

**Sensitivity estimates on anomalous couplings of the tau-lepton in pp, e-p and e-e+ colliders****Speaker**

Alejandro Gutierrez-Rodriguez

**Production of  $\eta$ -meson pairs with ALICE at the LHC: a novel probe for strangeness production****Speaker**

Nicola Rubini

**Ultra-High Energy Proton-Proton Collision in the Laboratory System as the Source of Proton, Neutrino and Gamma Spectra in Space****Speaker**

Olga Piskounova

**LCDAs of heavy hadrons and their first inverse moments**

**Speaker**

Alisa Shukhtina

**Identical-particle (pion and kaon) femtoscopy in Pb-Pb collisions at  $\sqrt{s_{\text{NN}}} = 5.02$  TeV with Therminator 2 modeled with (3+1)D viscous hydrodynamics****Speaker**

Pritam Chakraborty

**Mass spectra and radiative decays of single charm baryons in the hyperspherical approach****Speaker**

Asadollah Tavakolinezhad

**Multiplicity-dependent study of  $\Lambda(1520)$  resonance production in pp collisions at  $\sqrt{s} = 5.02$  and 13 TeV with ALICE****Speaker**

Sonali Padhan

**Higher-order QCD corrections to the Higgs decay into bottom quarks from Padé approximants****Speaker**

Cristiane Yumi London

**Measurement of very forward photon production cross-section at pp  $\sqrt{s} = 510$  GeV with RHICf detector****Speakers**

Gianluigi Cibinnetto, Hiroaki Menjo

**D-meson average production analysis as a function of multiplicity in pp collisions at  $\sqrt{s} = 13$  TeV with ALICE at the LHC****Speaker**

Marco Giacalone

**Investigating strangeness production in pp collisions as a function of charged-particle multiplicity and effective energy with ALICE****Speaker**

Francesca Ercolessi

**Charged particle pseudorapidity density in proton-proton collisions at  $\sqrt{s} = 900$  GeV with the ALICE MFT****Speaker**

Sarah Herrmann

**The cosmic antiproton puzzle****Speaker**

Francesco D'Angelo

**Abstract of ICHEP 2022 for "Muon Modulation Study"****Speaker**

Mr Bangzheng Ma

**Black holes and nilmanifolds: quasinormal modes as fingerprints of extra-dimensions**

**Speaker**

Anna Chrysostomou

**Measurement of the top quark pole mass using  $t\bar{t}$ +jet events in the dilepton final state at 13 TeV****Speaker**

Sebastian Wuchterl

**A Narrow Mass Window Search for the Axion/ALP Field****Speaker**

Masroor Bukhari

**HIGH-MOUNTAIN BURST DETECTOR FOR STUDYING THE CORES OF EXTENSIVE AIR SHOWERS****Speaker**

Mr Nurzhan Yerezhep

**Linac-200: a new electron test beam facility****Speaker**

Aleksei Trifonov

**ATLAS Inner Detector alignment towards Run 3****Speaker**

Mariam Chitishvili

**Machine learning approaches for parameter reweighting for MC samples of top quark production in CMS****Speaker**

Valentina Guglielmi

**Searches for supersymmetry in final states with at least two hadronically decaying tau leptons using the ATLAS detector****Speaker**

Daniela Koeck

**Search for Baryogenesis and Dark Matter in  $B^0$ -meson decays at BABAR.****Speaker**

Dexu Lin

**Measurements of jet and soft activity in  $\sqrt{s_{NN}} = 200$  GeV p+Au collisions at STAR****Speaker**

Veronica Verkest

**Dynamically groomed jet radius in heavy-ion collisions****Speaker**

Adam Takacs

**Elastic neutrino-atom scattering as a probe of neutrino millicharge and magnetic moment****Speaker**

Konstantin Kouzakov

**New Geant4 model of channeling in crystals and its applications in modern physics**

**Speaker**  
Alexei Sytov

**A hybrid flavor model with a scotogenic and type-I seesaw mechanism**

**Speaker**  
Biswajit Karmakar

**Probing hadronization and jet substructure with leading particles in jet at H1**

**Speaker**  
Mriganka Mouli Mondal

**Study of the heavy bottom baryons in a potential model**

**Speaker**  
Zahra Ghalenovi

**Search for rare decays at BESIII**

**Speaker**  
Yunxuan Song

**Prospects for Beyond the Standard Model Studies at the Deep Underground Neutrino Experiment**

**Speaker**  
Wooyoung Jang

**Strong-interaction investigated with kaonic atoms at the DAFNE Collider**

**Speaker**  
Luca De Paolis

**Light flavor vector mesons between 2 and 3 GeV at BESIII**

**Speaker**  
Hang Qi

**Black hole shadows: from LQG to expanding universe: what can they tell us**

**Speaker**  
Sayan Kumar Chakrabarti

**Single-differential top quark pair production cross sections with running mass schemes at NLO**

**Speaker**  
Toni Mäkelä

**Search for central exclusive production of top quark pairs with the CMS and TOTEM experiments**

**Speaker**  
Beatriz Ribeiro Lopes

**Grover's quantum search algorithm of causal multiloop Feynman integrals.**

**Speaker**  
Andrés Rentería

**Inelastic Axial and Vector Structure Functions for Lepton-Nucleon Scattering 2021 Update**

**Speaker**  
Arie Bodek

**Astroparticle experiments to improve the biological risk assessment of exposure to ionizing radiation in the exploratory space missions: a research topic initiative**

**Speaker**  
Alessandro Bartoloni

**Recent MicroBooNE cross-section results: neutrino-induced baryon production**

**Speaker**  
Richard Diurba

**Sensitivity to Heavy Neutral Leptons with the SAND detector at the DUNE ND complex**

**Speaker**  
Mrs Zahra Ghorbanimoghaddam

**A simulation study of tau events at the proposed ICAL in INO**

**Speaker**  
Mr Thiru Senthil R

**Propagation of error in the Physics analysis with the variation in magnetic field in the ICAL detector**

**Speaker**  
Ms Honey Khindri

**Magnetic field simulations and measurements on mini-ICAL**

**Speaker**  
Ms Honey Khindri

**A Geant4-based simulation study for a preliminary setup of the MUonE experiment**

**Speaker**  
Patrick Asenov

**Current Status of Resummed Quantum Gravity**

**Speaker**  
Bennie Ward

**Experiment for direct measurements of short-lived particle dipole moments at LHC**

**Speaker**  
Giorgia Tonani

**Solar constraints on captured electrophilic dark matter**

**Speaker**  
Debajit Bose

**Anisotropy of Positron and Electron Fluxes Measured with the Alpha Magnetic Spectrometer on the ISS**

**Speaker**  
Dr Miguel Molero Gonzalez

## **Charged-particle production as a function of multiplicity from small to large collision systems with ALICE**

**Speaker**

Mario Krüger

## **Modelling the formation of light (anti)nuclei via coalescence using Monte Carlo generators**

**Speaker**

Maximilian Horst

## **LHC Benchmark scenarios in the TRSM**

**Speaker**

Tania Robens

## **Neutrino mass and the early universe**

**Speaker**

Bowen Fu

## **Measurement of antiproton production cross sections for dark matter search at the AMBER Experiment at CERN**

**Speaker**

Davide Giordano

## **The muon g-2 at a high-energy muon collider: simplified models analysis**

**Speaker**

Alessandro Valenti

## **Not a jet all the way - a search for semi-visible jets in t-channel production mode with ATLAS Run-2 data**

**Speaker**

Sukanya Sinha

## **$B \rightarrow K^{(*)} \nu \bar{\nu}$ in the Standard Model and beyond**

**Speaker**

Gioacchino Piazza

## **Update on the D meson mixing data average by the UFit Collaboration**

**Speaker**

Marcella Bona

## **Design and Construction of hundred-ton liquid neutrino detector at CJPL II**

**Speaker**

Benda Xu

## **PTOLEMY: The Experimental challenge to Detect Relic Neutrinos from the Big Bang**

**Speaker**

Gianluca Cavoto

## **Luminosity measurements for heavy-ion collisions at the CMS experiment in Run 2**

**Speaker**

Krisztián Farkas

**Improved track reconstruction for prompt and long-lived particles in ATLAS for the LHC Run 3****Speaker**

David Muñoz Pérez

**Development and evaluation of prototypes for the ATLAS ITk pixel detector****Speaker**

Brian Moser

**Measurements of quartic coupling and vector boson scattering in ATLAS****Speaker**

Aleksandr Petukhov

**Overview of IR-Improvement in Precision LHC/FCC Physics****Speaker**

Scott Yost

**Photon-ALP oscillations at TeV energies****Speaker**

Jonas Tjemsland

**An overview on low mass scalars at future lepton colliders****Speaker**

Tania Robens

**New flavor physics in di- and tri-lepton events from single-top at the LHC****Speaker**

Dr Shaouly Bar-Shalom

**Recent results on single top productions in CMS****Speaker**

Alejandro Soto Rodriguez

**PYTHIA8 predictions to the Underlying event measurements using different PDF sets****Speaker**

Nameeqa Firdous

**Proton parton distribution functions using ATLAS data****Speaker**

Eimear Conroy

**Search for exotic resonances with the CMS experiment****Speaker**

Leonardo Lunerti

**The CMS Precision Proton Spectrometer Project for the HL-LHC****Speaker**

Gustavo Gil da Silveira

**Eco-friendly gas mixtures for future RPC detectors****Speaker**

Giorgia Proto

**The pointing strategy for the Self-Calibration of the Euclid mission****Speaker**

Ms Ilaria Risso

**Studying Hadronization by Machine Learning Techniques****Speaker**

Gabor Biro

**Development of the dual-readout calorimeter for future e+e- colliders****Speaker**

Bobae Kim

**The R&D of the MCP based PMTs for High Energy Physics****Speaker**

Sen Qian

**Far-Forward detectors at the Electron-Ion Collider****Speaker**

Dr Alexander Bylinkin

**A common eh/hh interaction region and detector for the LHC****Speaker**

Néstor Armesto

**Investigation of Thermal Neutron Radiation Shielding Features of B2O3 and Gd2O3-doped Materials (Quartz, Glasses, Al, W) by Using MCNP6.2****Speaker**

Mirac Kamislioglu

**Large scale SiPM testing for the Cosmic Muon Veto detector****Speaker**

Mamta Jangra

**Full simulation results of a fully-projective dual-readout calorimeter for future lepton colliders****Speaker**

Iacopo Vivarelli

**The NA60+ experiment at the CERN SPS to study dilepton and heavy quark production at large  $\mu_B$** **Speaker**

Maryna Borysova

**The Potential to Probe Solar Neutrino Physics with LiCl Water Solution****Speaker**

Zhe Wang

**Parker Bound and Monopole Production from Primordial Magnetic Fields****Speaker**

Daniele Perri

**A key tool to probe Euclid spectroscopy: Spectro-Photometric simulations of galaxies to unravel NISP's capabilities**

**Speaker**

Louis Gabarra

**Properties of Heavy Nuclei in South Atlantic Anomaly region****Speaker**

Martha Valencia Otero

**Nuclear coalescence, collective behaviour and emission volume in small interacting systems****Speaker**

Jonas Tjemsland

**Precision Measurement of the Monthly Proton, Helium, Carbon and Oxygen Fluxes in Cosmic Rays with the Alpha Magnetic Spectrometer on the International Space Station****Speaker**

Alejandro Reina Conde

**Study of the EUSO-SPB2 Photodetection Module****Speaker**

Beatrice Panico

**HE Stratosphere Event of 1975 Revisited: the Difference between the Patterns of Astroparticle Interaction and LHC Nucleus-Nucleus Collision.****Speaker**

Olga Piskounova

**Thermal production of Sexaquarks in Heavy Ion Collisions****Speaker**

Sonia Kabana

**Transverse momentum spectra and Nuclear Modification factor in Xe-Xe collisions at 5.44 TeV under HYDJET++ framework****Speaker**

Saraswati Pandey

**Deviations from isotropic turbulence of heavy-ion collision plasma****Speaker**

ABHISEK SAHA

**The information content of jet quenching and machine learning assisted observable design****Speaker**

Yue Shi Lai

**A study of dark matter using Monte Carlo event generator predictions****Speaker**

Nameeqa Firdous

**Ultra-Low Noise Axion Dark Matter Search Using a Josephson Parametric Amplifier at CAPP****Speaker**

Mr Jinsu Kim

**Multiplicity dependence of intra-jet properties in small collision systems with ALICE****Speaker**

Debjani Banerjee

**Improving Bayesian parameter estimation of QCD matter with the latest LHC heavy-ion collision data****Speaker**

Anna Öennerstad

**Searching for viscous effects in small systems with ALICE****Speaker**

Victor Gonzalez

**Finite System Size Correction in  $\phi^4$  Theory NLO scattering****Speaker**

Jean Du Plessis

**Measurements of charge-dependent correlations with CMS****Speaker**

Subash Behera

**Open heavy flavor production with the STAR experiment at RHIC****Speaker**

Sonia Kabana

**Neutrinos from captured dark matter annihilation in a galactic population of neutron stars****Speaker**

Debajit Bose

**Neutrino physics from a gauged U(1) extension of the Standard Model****Speaker**

Timo Kärkkäinen

**CP violation and flavor invariants in the seesaw effective field theory****Speaker**

Bingrong Yu

**Probing light mediators through detection of coherent elastic neutrino nucleus scattering at COHERENT****Speaker**

Yiyu Zhang

**Demonstration of a novel, ton-scale, pixel-readout LArTPC for the DUNE near detector****Speaker**

Anja Gauch

**Higgs Self Couplings Measurements at Future proton-proton Colliders****Speaker**

Claudio Caputo

**Search for heavy neutrinos and extra gauge bosons at the CMS**

**Speaker**

Si Hyun Jeon

**New physics contributions to  $Wtb$  anomalous couplings and top-quark decay.****Speaker**

Ms Apurba Tiwari

**SHK22.h: Neural Network QCD analysis of charged hadron Fragmentation Functions in the presence of SIDIS data****Speaker**

Hamzeh Khanpour

**Neutrino mixing angle and neutrino oscillation in ALPs matter.****Speaker**

Alexey Lichkunov

**Search for single production of a vector-like  $T$  quark decaying into a Higgs boson and top quark with fully hadronic final states using the ATLAS detector****Speaker**

Sahibjeet Singh

**Search for doubly charged Higgs boson production in multi-lepton final states using 139 fb<sup>-1</sup> of proton-proton collisions at  $\sqrt{s} = 13$  TeV with the ATLAS detector****Speaker**

Blaž Leban

**Search for a new gauge boson  $Z'$  in  $4\mu$  events with the ATLAS experiment****Speaker**

Zhe Yang

**Search for heavy resonances decaying into a Z or W boson and a Higgs boson in final states with leptons and b-jets****Speaker**

Tong Qiu

**Sensitivity study for proton decay via  $p \rightarrow e^+ \pi^0 \pi^0$  and  $p \rightarrow \mu^+ \pi^0 \pi^0$  in the Super-Kamiokande Detector****Speaker**

Ji-Woong Seo

**Search for Heavy (pseudo)Higgs boson A/H produced in association with a top-antitop quark pair leading to the final state with four top quarks in pp collisions at  $\sqrt{s} = 13$  TeV with the ATLAS detector****Speaker**

Meng-Ju Tsai

**Search for long-lived particles in events with a displaced vertex using the ATLAS detector with the full Run2 dataset****Speaker**

Moe Wakida

**Search for new physics in multi-body invariant masses in dijet events with an isolated lepton using  $\sqrt{s} = 13$  TeV proton--proton collision data collected by the ATLAS detector**

**Speaker**

Huang Yu Meng

**Prospects for the Nucleon Decay Search in the JUNO Experiment**

**Speaker**

Dr Yuhang Guo

**Search for heavy scalars with flavour-violating couplings in multi-lepton and multi-b-jets final states**

**Speaker**

Merve Nazlim Agaras

**Novel broad-mass search for new scalar particles in FCNC top quark decays using the full Run 2 data of the ATLAS detector**

**Speaker**

Nicola Orlando

**Cosmic Muon Images: REINFORCE muon tomography citizen science demonstrator**

**Speaker**

Theodore Avgitas

**AxeLatoon — Let's Build an Accelerator at School!**

**Speaker**

Mr Shota Takahashi

**WP4**

**Speaker**

Enzo Oukacha

**Outreach Modules for a New Particle Search Using the ATLAS Forward Proton Detector and Higgs Boson Physics**

**Speaker**

Andre Sopczak

**The search for New Particles at CERN on the Zooniverse citizen science platform**

**Speaker**

Stylios Angelidakis

**Implementation of a Portal Dedicated to Higgs Bosons for Experts and the General Public**

**Speaker**

Andre Sopczak

**GWitchHunters - A citizen science project for the improvement of gravitational wave detectors**

**Speaker**

Francesco Di Renzo

**Extending DUNE computing to the UK**

**Speaker**

Andrew McNab

**Invertor - Program to compute exact inversion of large matrices****Speaker**

Mr Thiru Senthil R

**Strategies of a WLCG Tier-2 site to meet the challenge of ever growing demands on delivery of computing resources****Speaker**

Jiří Chudoba

**Prototype of a cloud native solution of Machine Learning as Service for HEP****Speaker**

Luca Giommi

**A Novel Algorithm to Reconstruct Events in a Water Cherenkov Detector****Speaker**

Prof. Chiaki Yanagisawa

**The Mu2e experiment at Fermilab: TDAQ and slow control production systems installation****Speaker**

Antonio Gioiosa

**The CMS Inner Tracker Endcap Pixel Upgrade****Speaker**

Sascha Liechti

**Triggering on electrons, photons, tau leptons, Jets and energy sums at HL-LHC with the upgraded CMS Level-1 Trigger****Speaker**

Peter Meiring

**Level-1 Track Quality Evaluation at CMS for the HL-LHC****Speaker**

Claire Savard

**Point Cloud Deep Learning Methods for Pion Reconstruction in the ATLAS Detector****Speaker**

Dilia Maria Portillo Quintero

**Demonstrator system for the high-luminosity upgrade of the ATLAS hadronic Tile Calorimeter****Speaker**

Pavle Tsotskolauri

**Two New Developments on the Statistical Treatment of Flavour Tagging Uncertainties in ATLAS****Speaker**

ilaria luise

**Pre-launch optical verification of the Euclid mission NISP Instrument**

**Speaker**

Louis Gabarra

**Expected tracking and related performance with the future ATLAS Inner Tracker at the HL-LHC****Speaker**

Yassine El Ghazali

**Performance of the trigger-veto detector for Korea Experiments on Magnetic Monopole****Speaker**

Ms Bobae Kim

**Design and optimization of the KAPAE phase II detector for searching of positronium invisible decay****Speaker**

Dongwoo Jeong

**The Particle Flow Algorithm in the Phase II Upgrade of the CMS Level-1 Trigger****Speaker**

Aidan Chambers

**ATLAS-ITk Pixel Module Loading techniques for HL-LHC****Speaker**

Joshua Stewart

**Module developments for the ATLAS-ITk pixel detector****Speaker**

Liam Cunningham

**Calibration of the light jet mistag rate of the ATLAS b-tagger using Z + jets events****Speaker**

Laura Pereira Sánchez

**Measurement of the b-tagging efficiency using multijet events in ATLAS****Speaker**

Zak Lawrence

**ATLAS Run 3 charged-particle reconstruction performance in energetic jets****Speaker**

Otilia Ducu

**The Heavy Flavor Production Fraction Reweighting Procedure in ATLAS****Speaker**

Iliia Kalaitzidou

**Level 1 Muon Triggers for the CMS Experiment at the HL-LHC****Speakers**

Marcin Konecki, Marianna Głażewska

**New ATLAS b-tagging algorithm for Run 3****Speaker**

Martino Tanasini

**The boosted  $X \rightarrow b\bar{b}$  tagger calibration using  $Z \rightarrow b\bar{b}$  events collected with the ATLAS detector****Speaker**

Daariimaa Battulga

**g to bb Rejection for the b-jet Triggers at ATLAS Poster Abstract****Speaker**

Maggie Chen

**First direct detection constraints on Planck-scale mass dark matter in DEAP-3600****Speaker**

Michela Lai

**Event characterization of dark bosons via exotic Higgs decays with final states of displaced dimuons in high luminosity era of the LHC****Speaker**

Tamer Elkafrawy

**Directionality for nuclear recoils in a liquid argon Time Projection Chamber****Speaker**

Raoul Cesarano

**The SABRE South experiment at the Stawell Underground Physics Laboratory****Speaker**

Michael Mews

**Prospects for Detecting the Diffuse Supernova Neutrino Background with JUNO****Speaker**

Yiyu Zhang

**Elastic neutrino scattering on nuclear systems as a probe of neutrino electromagnetic interactions****Speaker**

Fedor Lazarev

**Neutrino oscillations in astrophysical environment accounting for neutrino charge radius and anapole moment****Speaker**

Vadim Shakhov

**Improved measurements of timing and optical properties of the JUNO liquid scintillator with SHELDON****Speaker**

Federico Ferraro

**Oscillations of Majorana neutrinos in supernova and CP violation****Speaker**

Artem Popov

**Search For Electron-Antineutrinos Associated With Gravitational-Wave Events GW150914, GW151012, GW151226, GW170104, GW170608, GW170814, and GW170817 at Daya Bay**

**Speaker**  
Huiyou Chen

### **A pure probabilistic approach to event reconstruction at JUNO**

**Speaker**  
Xuewei Liu

### **Phenomenological aspects of $A_5^{\prime}$ modular symmetry on linear seesaw with leptogenesis**

**Speaker**  
Mitesh Kumar Behera

### **Mass testing of Large-PMT electronics at Kunshan for the JUNO experiment**

**Speaker**  
Riccardo Triozzi

### **Kaon production in the charged-current neutrino interactions in the T2K experiment**

**Speaker**  
Katarzyna Kowalik

### **Vertex reconstruction in JUNO-TAO using Deep Learning**

**Speaker**  
Ms Vidhya Thara Hariharan

### **Constraining cross-section and flux uncertainty in T2K using Markov Chain Monte Carlo**

**Speaker**  
Kamil Skwarczynski

### **Tau Neutrino Appearance in the Flux of Atmospheric Neutrinos at the Super-Kamiokande Experiment**

**Speaker**  
Maitrayee Mandal

### **Selection of multi-ring charged current $\nu_{\mu} \rightarrow \pi^+ e$ samples and estimation of detector systematic uncertainties at T2K far detector**

**Speaker**  
Lakshmi Sandhya Mohan

### **Evaluation of neutron tagging efficiency for SK-Gd experiment**

**Speaker**  
Masayuki Harada

### **Characterization of JUNO Large-PMT electronics in a complete small scale test setup**

**Speaker**  
Vanessa Cerrone

### **Search for Environmentally-Induced Decoherence Effects on $\nu$ -oscillation at Long-baseline Experiments**

**Speaker**  
Mr Arnab Sarker

**Neutrino propagation in moving and polarized matter****Speaker**

Alexander Studenikin

**Calibration Strategy of the JUNO Experiment****Speaker**

Yue Meng

**Mantle insights from KamLAND and Borexino results****Speaker**

Triozi Riccardo

**Direction reconstruction of atmospheric neutrinos in JUNO with machine learning method****Speaker**

Dr Zhen Liu

**Muon flux and muon-induced neutron yield measurement at China Jinping underground laboratory****Speaker**

ZHANG Bin

**Quantum decoherence of neutrino mass states****Speaker**

Konstantin Stankevich

**Matter polarization effect on neutrino spin oscillations****Speaker**

Alexander Grigoriev

**Daya Bay neutrino oscillation results with full dataset****Speaker**

Hongzhao Yu

**Reconstruction of atmospheric neutrino events at JUNO****Speaker**

Rosmarie Wirth

**Status of Neutrino Elastic-scattering Observation with NaI(Tl) experiment (NEON)****Speaker**

byungju park

**The SAND detector at the DUNE near site****Speaker**

Gianfranco Ingratta

**Upgrade of the DANSS detector of reactor antineutrino****Speaker**

Nataliya Skrobova

**High-energy reactor neutrino flux measurement at Daya Bay****Speaker**

Dr Yongbo Huang

**Daya Bay neutrino oscillation results based on neutron captured on Hydrogen****Speaker**

Tong Xu

**JUNO Atmospheric Neutrino Mass Ordering Sensitivity****Speaker**

Jinnan Zhang

**Calibration of the LEGEND-200 experiment****Speaker**

Yannick Mueller

**New 2-ring  $\nu_e$  CC  $\pi^+$  samples at the T2K Far Detector****Speaker**

Yashwanth S. Prabhu

**The Veto System of the JUNO Experiment****Speaker**

Eric Baussan

**Overall status of 20-inch PMT Instrumentation for the JUNO Experiment****Speaker**

Zhonghua Qin

**Study of environment-friendly gas mixtures for the Resistive Plate Chambers****Speaker**

Giorgia Proto

**Progress of Jinping Neutrino 1-t detector -- the prototype of future low background neutrino detectors at CJPL****Speaker**

Yiyang Wu

**GPU-accelerated Bayesian method for waveform analysis****Speaker**

Yuyi Wang

**A SiPM-based optical readout system for the EIC dual-radiator RICH****Speaker**

Luigi Pio Rignanese

**Study of output spectrum and optimization of the composition of toluene-based liquid scintillator****Speaker**

Dmitriy Beznosko

**Simulated performance of a multi-purpose experiment at a Muon Collider****Speaker**

Paola Salvini

**Global fit of the Higgs and the Electroweak sector with the ATLAS experiment****Speaker**

Rahul Balasubramanian

**Measurement prospects for di-Higgs production in the HH to bbyy channel with the ATLAS experiment at the HL-LHC**

**Speaker**  
Alex Wang

**Virtual QCD Corrections to  $gg \rightarrow ZH$  via a Transverse Momentum Expansion**

**Speaker**  
Marco Vitti

**Constraints on Higgs boson production with large transverse momentum using  $H \rightarrow b\bar{b}$  decays in the ATLAS detector.**

**Speaker**  
Federico Celli

**Measurement of the Higgs boson mass in the  $H \rightarrow ZZ \rightarrow 4l$  channel with the full Run 2 dataset.**

**Speaker**  
Siyuan Yan

**Higgs boson combination measurements using up to 139 fb of pp collision data at  $\sqrt{s}=13$  TeV collected by the ATLAS**

**Speaker**  
Changqiao LI

**Between even and odd: probing the CP nature of the Higgs-top Yukawa coupling**

**Speaker**  
Ana Luisa Carvalho

**Search for resonant and non-resonant Higgs boson pair production in the  $b\bar{b}\tau\tau$  decay channel using 13 TeV pp collision data from the ATLAS detector**

**Speaker**  
Jem Guhit

**Fiducial and differential cross-section measurements in the di-photon channel using full Run2 dataset at ATLAS**

**Speaker**  
Fabio Lucio Alves

**Projected sensitivity of Higgs boson pair production combining the bbyy and  $b\bar{b}\tau\tau$  decay channels at the HL-LHC with the ATLAS detector**

**Speaker**  
Pearkes Jannicke Andree

**Searches for exclusive Higgs and Z boson decays into a vector quarkonium state and a photon with the ATLAS experiment**

**Speaker**  
Robert Ward

**Search for the Higgs boson decaying to a pair of muons in pp collisions at 13 TeV with the ATLAS detector**

**Speaker**  
Jay Chan

**Search for Resonant and Non-Resonant VHH Production**

**Speaker**

Nicholas Kyriacou

**Study of HH production at the High-Luminosity LHC with CMS****Speaker**

Suat Donertas

**Search for non-resonant di-Higgs production in the bbbb final state at 13 TeV with the ATLAS experiment****Speaker**

Shota Hayashida

**Search for non-resonant Higgs bosons pairs production in the bbtatau final state at CMS****Speaker**

Davide Zuolo

**Inclusive search for a boosted Higgs boson and observation of the Z boson decaying to charm quarks with the CMS experiment****Speaker**

Andrzej Novak

**Measurement of  $R_{\{2\}}(\Delta\eta, \Delta\varphi)$  and  $P_{\{2\}}(\Delta\eta, \Delta\varphi)$  correlation functions in pp collisions at  $\sqrt{s} = 13\sim\text{TeV}$  using ALICE data****Speaker**

Baidyanath Sahoo

**Transverse Sphericity and Multiplicity Dependence of  $R_{\{2\}}$  and  $P_{\{2\}}$  Correlation Functions in pp Collisions at  $\sqrt{s} = 7\text{ TeV}$  Using PYTHIA8****Speaker**

Baidyanath Sahoo

**Hadronic resonance production in small collision systems with ALICE at the LHC****Speaker**

Antonina Rosano

**Strangeness instabilities in high energy heavy-ion collisions****Speaker**

Andrea Lavagno

**Probing the hadronic phase of large hadronizing system through the study of the  $\Lambda(1520)$  resonance with ALICE at the LHC****Speaker**

Dr Neelima Agrawal

**Charged-particle production as a function of  $R_{\{T\}}$  in pp, p-Pb and Pb-Pb collisions at  $\sqrt{s_{\{NN\}}} = 5.02\text{ TeV}$  with ALICE at the LHC****Speaker**

Sushanta Tripathy

**FASER Tracker Detector - Commissioning, Installation, and Functionality**

**Speaker**

Savannah Shively

**Search for magnetic monopoles with diphoton events at the LHC****Speaker**

Emanuela Musumeci

**Search for long-lived neutral particles in pp collisions at  $\sqrt{s} = 13$  TeV that decay into displaced hadronic jets in the ATLAS calorimeter****Speaker**

Victoria Sánchez Sebastián

**Search for the direct production of chargino pairs decaying via W boson in 13 TeV pp collisions with the ATLAS detector****Speaker**

Matteo Greco

**Probing of charmonium and exotic multiquark states in hadron and heavy ion collisions****Speaker**

Prof. Mikhail Barabanov

**Status of anomalous triple gauge couplings in the light of recent results from muon (g-2) and other flavor observables.****Speaker**

Mr KULDEEP DEKA

**Porting DIRAC Benchmark to Python3: impact of the discrepancies and solutions****Speaker**

Alexandre Boyer

**Search for charged Higgs boson via  $H^\pm W^\mp$  at the LHC.****Speaker**

Dr Mohamed Ouchemhou

**Higher-order event-by-event mean- $\langle p_{\text{T}} \rangle$  fluctuations in pp and A-A collisions with ALICE****Speaker**

Swati Saha

**ATLAS Open Data: developing education and outreach resources from research data****Speaker**

Meirin Evans

**“PER (Particle Escape Room) me si va ne la fisica recente”****Speaker**

Simone Venturini

8:30 PM