

Session Program

26 August 2024 to 4 September 2024



XIII International Conference
on New Frontiers in Physics

26 Aug - 4 Sep 2024, OAC, Kolymbari, Crete, Greece

XIII International Conference on New Frontiers in Physics 2024

High Energy Particle Physics

Orthodox Academy of Crete, Kolymbari, Crete, Greece

Monday 26 August

11:00

High Energy Particle Physics

Session | **Location:** Room 1 | **Convener:** Prof. Armen Sedrakian

11:00–11:20

Lepton Flavour Universality tests using semileptonic b-hadron decays

Speaker

Bogdan Kutsenko

11:20–11:40

Recent measurement of CP violation and mixing with wrong-sign and right-sign $D^0 \rightarrow K\pi$ decays

Speaker

Mateusz Kmiec

11:40–12:00

STAR Spin Physics Highlight

Speaker

Ting Lin

12:00–12:20

Recent spin physics results from PHENIX

Speaker

Devon Loomis

12:20

16:00

High Energy Particle Physics

Session | **Location:** Room 1 | **Convener:** Francesco Longo

16:00–16:25

Exotic searches at ATLAS

Speaker

Gokhan Unel

16:25–16:50

Heavy-flavour results from ATLAS

Speaker

Umberto De Sanctis

16:50

Tuesday 27 August

11:00

High Energy Particle Physics

Session | **Location:** Room 2 | **Conveners:** Tamas Novak, Tamas Novak

11:00–11:20 **Recent results from SND@LHC experiment**

Speaker

Valeri Tioukov

11:20–11:40 **Search for long lived particles (CMS)**

Speaker

Daniel Guerrero

11:40–12:00

Prediction for the Anomalous $ZZ\gamma$ and $Z\gamma\gamma$ Couplings at Future Muon Collider

Speaker

Dr Emre Gürkanlı

12:00–12:20

Azimuthal transverse single-spin asymmetries of hadrons within jets from polarized $\{pp\}$ collisions at $\sqrt{s} = 510$ GeV

Speaker

Mr Yixin Zhang

12:20–12:40

Precision measurements of (anti)neutrinos interactions with the SAND detector at the DUNE near site

Speaker

Valerio Pia

12:40–13:00 **The HIBEAM experiment**

Speaker

Dr John Alexander Burgman

13:00

16:00

High Energy Particle Physics

Session | **Location:** Room 2 | **Convener:** Valerio Pia

16:00–16:20

Towards the implementation of the ENUBET neutrino cross section experiment at CERN

Speaker

Dr Daniele Guffanti

16:20–16:40

Results from Cryo-PoF project: power over fiber at cryogenic temperature for fundamental and applied physics.

Speaker

Andrea Falcone

17:00

16:40–17:00

The CUPID neutrinoless double-beta decay experiment**Speaker**

Mathieu Pageot

17:00

High Energy Particle Physics**Session** | **Location:** Room 1 | **Convener:** Valerio Pia

17:00–17:20

Measurements of Higgs boson properties (mass, width, and Spin/CP) with the ATLAS detector**Speaker**

Mohamed Aly

17:20–17:40

Measurements of the Higgs boson mass and width**Speaker**

Filippo Errico

17:40–18:00

Beyond the Standard Model in the Higgs sector**Speaker**

Simon Gabriel Grewe

18:00–18:20

Higgs Physics at Muon Collider**Speaker**

Luca Castelli

18:20

Wednesday 28 August

11:00

High Energy Particle Physics

Session | **Location:** Room 1 | **Convener:** Larisa Bravina

11:00–11:20 Electroweak measurements (CMS)

Speaker

Cristina-Andreea Alexe

11:20–11:40

Upgrade of ATLAS Hadronic Tile Calorimeter for the High Luminosity LHC

Speaker

Beatriz Pereira

11:40–12:00 Overview of Trigger/DAQ in CMS

Speaker

Swagata Mukherjee

12:00–12:20 CMS Upgrades

Speaker

Rosamaria Venditti

12:20–12:40 Performance of the CMS Electromagnetic Calorimeter in Run3

Speaker

Maria Margherita Obertino

12:40–13:00 The CMS electromagnetic calorimeter

Speaker

Rajdeep Mohan Chatterjee

13:00

16:00

High Energy Particle Physics

Session | **Location:** Room 4 | **Convener:** Maria Margherita Obertino

16:00–16:20 ATLAS searches for non-minimal and long-lived SUSY scenarios

Speakers

Risa Ushioda, Risa Ushioda

16:20–16:40 Tests of LFU and searches for LFV in heavy flavor decays at CMS

Speaker

Marco Buonsante

16:40–17:00

Unveiling Neutrinoless Double Beta Decay with the NEXT Detectors: Advances, Achievements, and Future Prospects

Speaker

Helena Almazan

17:00–17:20 Precision measurements of τ lepton decays at Belle-II

Speaker

Arthur THALLER

17:20–17:40

Light readout in DarkSide-20k: from Silicon Photo Multiplier dies to the Photo Detection Units integration in the NOA packaging facility.**Speaker**

Lucia Consiglio

17:40–18:00

Semileptonic and missing energy B decays at Belle II**Speaker**

Giovanni Gaudino

18:00–18:20

Towards Photon Counting at the ALPS II Experiment: Efficient Background Discrimination for TES-Based Single-Photon Detectors**Speaker**

Elmeri Rivasto

18:20

Thursday 29 August

11:00

High Energy Particle Physics

Session | **Location:** Room 3 | **Convener:** Lais Soares Lavra

11:00–11:20

Photoproduction of heavy meson pairs

Speaker

Marat Siddikov

11:20–11:40

Nonperturbative contributions to the low transversal momentum Drell-Yan pair production at NLO using the Parton Branchin Method

Speaker

Natasa Raicevic

11:40–12:00

Pion Gravitational Form Factors in Holographic QCD

Speaker

Mr Mitsuru Tanaka

12:00

Friday 30 August

09:00

High Energy Particle Physics

Session | **Location:** Room 1 | **Convener:** Dr Trambak Bhattacharyya

09:00–09:30 **LHCb highlights**

Speaker

Lais Soares Lavra

09:30–10:00 **CMS Highlights**

Speaker

John Strologas

10:00–10:30 **Highlights from pp Collisions at ATLAS**

Speaker

Stefano Passaggio

10:30

11:00

High Energy Particle Physics

Session | **Location:** Room 1 | **Convener:** Tommaso Dorigo

11:00–11:20

Measurements of Higgs boson production and decay rates with the ATLAS experiment

Speaker

Eva Guilloton

11:20–11:40

Highlights on top quark physics with the ATLAS experiment at the LHC

Speaker

Jialin Li

11:40–12:00

ATLAS searches for electroweak supersymmetry with compressed spectra

Speaker

Hammad Rasheed

12:00–12:20 **Performance of the CMS Tracker during LHC Run 3**

Speaker

Lakshmi Pramod

12:20–12:40 **Progress of the Super Tau Charm Facility**

Speaker

Lailin Xu

12:40

Monday 2 September

10:00

High Energy Particle Physics

Session | **Location:** Room 1 | **Convener:** Dr Luciano Errico

10:00–10:30 **Multi-quark states at LHCb**

Speaker

Mr Salil Joshi

10:30

11:40

High Energy Particle Physics

Session | **Location:** Room 1 | **Convener:** Konstantin Zhukovsky

11:40–12:00

Electroweak measurements of multiboson production with the ATLAS experiment

Speaker

Stefanie Andrea Gotz

12:00–12:20

Recent results on strangeness enhancement in small collision systems with ALICE

Speaker

Sara Pucillo

12:20–12:40 **B physics, rare decays (CMS)**

Speaker

Giacomo Fedi

12:40–13:00

Observation of quantum entanglement in top-quark pair production with the ATLAS detector

Speaker

Zoe Olivia Earnshaw

13:00

16:00

High Energy Particle Physics

Session | **Location:** Room 1 | **Convener:** Ting Lin

16:00–16:25 **Search for Higgs boson production through resonance decays (CMS)**

Speaker

Rainer Mankel

16:25–16:50 **Di-Higgs (CMS)**

Speaker

Simona Palluotto

16:50–17:15

Combined Higgs boson measurements and their interpretations with the ATLAS experiment

Speaker

Yifan Zhu

17:15

Tuesday 3 September

11:00

High Energy Particle Physics

Session | **Location:** Room 1 | **Convener:** Stefano Passaggio

11:00–11:20

Upgrade of the CMS Electromagnetic Calorimeter for the High-Luminosity LHC

Speaker

Giulia Lavizzari

11:20–11:40

Searches for hidden sectors and lepton flavour violation in kaon decays

Speaker

Marco Mirra

11:40–12:00

Searches of exotic decays with NA62 in beam-dump mode

Speaker

Stefan Alexandru Ghinescu

12:00–12:20

Performance of the ICARUS Trigger System at the Booster and NuMI Neutrino Beams

Speaker

Riccardo Triozzi

12:20

12:40

High Energy Particle Physics

Session | **Location:** Room 3 | **Convener:** Anke Lei

12:40–13:00

Production of the glueball-like particle X(2370) in e+e- and pp collisions with PACIAE model

Speaker

Anke Lei

13:00

16:00

High Energy Particle Physics

Session | **Location:** Room 3 | **Convener:** Martina Ressegotti

16:00–16:20

Overview of the STAR forward spin physics

Speaker

Xilin Liang

16:20–16:40

The BDF/SHiP experiment at the ECN3 high-intensity beam facility at the CERN SPS

Speaker

Vasilisa Guliaeva

16:40-17:00

Study of the e^+e^- annihilation into hadrons with the SND detector at the VEPP-2000 collider

Speaker

Alexander Botov

17:00-17:20

Exploring coherent elastic neutrino-nucleus scattering with the NUCLEUS experiment

Speakers

Nicole Schermer, Nicole Schermer

17:20

Wednesday 4 September

09:00

High Energy Particle Physics

Session | **Location:** Room 1 | **Convener:** Carla Aramo

09:00–09:30

ICARUS at the Short-Baseline Neutrino program: first results

Speaker

Maria Artero Pons

09:30

12:15

High Energy Particle Physics

Session | **Location:** Room 1 | **Convener:** Jon Paul Lundquist

12:15–12:40

Latest Results and Outlook of the Muon g-2 Measurement

Speaker

Esra Barlas Yucel

12:40–13:00

QCD measurements with ATLAS

Speaker

Dionysios Fakoudis

13:00

14:00

High Energy Particle Physics

Session | **Location:** Room 1

14:00–14:25

Recent results from Belle and Belle II

Speaker

Cristina Martellini

14:25