

Session Program

8-12 Jul 2024

**22nd International Symposium on Very High
Energy Cosmic Ray Interactions (ISVHECRI
2024)**

Contributed talks

Fiesta Americana
Puerto Vallarta

Monday 8 July

17:00

Contributed talks

Session | **Location:** Fiesta Americana, Puerto Vallarta | **Convener:** Sunil Gupta

17:00–17:20 **The Cosmic Ray Extremely Distributed Observatory (CREDO) [Online]**

Speaker

David Edwin Alvarez Castillo

17:20–17:40

POEMMA-Balloon with Radio: a balloon born Multi-Messenger Observatory

Speaker

Valentina Scotti

17:40–18:00

Status and First Results from the KM3NeT neutrino telescope [Online]

Speaker

Evangelia Drakopoulou

18:00–18:20

The Giant Radio Array for Neutrino Detection - experimental status and plans

Speaker

Lech Wiktor Piotrowski

18:20–18:40

The Southern Wide-field Gamma Ray Observatory (SWG0)

Speaker

KAREN SALOME CABALLERO MORA

18:40

Tuesday 9 July

10:00

Contributed talks

Session | **Location:** Fiesta Americana, Puerto Vallarta | **Convener:** Lukas Nellen

10:00–10:20

Mean number of TeV muons in air showers measured with IceTop and IceCube

Speaker

Stef Verpoest

10:20–10:40

Top-Down reconstruction of extensive air showers: a method to quantify the rescaling of the muon signal of hadronic interaction models

Speaker

Kevin Cheminant

10:40–11:00

A measurement of the muon number of extensive air showers from cosmic ray collisions using the data from KASCADE-Grande

Speaker

Juan Carlos Arteaga

11:00

11:30

Contributed talks

Session | **Location:** Fiesta Americana, Puerto Vallarta | **Convener:** Rodrigo Gamboa Goñi

11:30–11:50

Estimation of the cosmic-ray mass composition and proton-proton interaction cross sections from air shower data measured by the Pierre Auger Observatory [Online]

Speaker

Olena Tkachenko

11:50–12:10

Investigating the hadron nature of high-energy photons with PeVatrons [Online]

Speaker

Giuseppe Di Sciascio

12:10–12:30

Neutrinos from muon-rich ultra high energy electromagnetic cascades: The MUNHECA code [Online]

Speaker

AmirFarzan Esmaeili

13:00

15:30

Contributed talks

Session | **Location:** Fiesta Americana, Puerto Vallarta | **Convener:** Antonella Castellina

15:30–15:50

Neutron Production in Extensive Air Showers

Speaker

Ralph Engel

16:10

15:50-16:10 **Results from the first 8.5 years of operation with CALET**

Speaker

Yosui Akaike

17:10

Contributed talks

Session | **Location:** Fiesta Americana, Puerto Vallarta | **Convener:** Eduardo de la Fuente Acosta

17:10-17:30

High-energy Hadronic Interaction Models: Insights from the Pierre Auger Observatory

Speaker

Ruben Mauricio Da Silva Conceicao

17:30-17:50

High Energy Neutrinos studies in the forward direction with the FASER experiment at the LHC

Speaker

Osamu Sato

17:50-18:10

Machine learning model for discrimination of simulated muonic traces in water cherenkov detectors

Speaker

Erick Berazain

18:10-18:30

Neutrino Classification Through Deep Learning

Speaker

María Fernanda Romo Fuentes

18:30

Wednesday 10 July

10:00

Contributed talks

Session | **Location:** Fiesta Americana, Puerto Vallarta | **Convener:** Sergey Ostapchenko

10:00–10:20 **EPOS LHC-R : up-to-date hadronic model for EAS simulations**

Speaker

Dr Tanguy Pierog

10:20–10:40 **Investigating Muon Content in Extensive Air Showers using Pythia 8**

Speaker

Chloé Gaudu

10:40–11:00 **Hadronic Interactions in CRPropa with state-of-the-art generators**

Speaker

Leonel Morejon

11:00

11:30

Contributed talks

Session | **Location:** Fiesta Americana, Puerto Vallarta | **Convener:** John Mathews

11:30–11:50 **Production and propagation of secondary antinuclei in the Galaxy**

Speaker

Luis Fernando Galicia Cruztitla

11:50–12:10

Preliminary atmospheric effects through air showers at Agra using DEASA experiment [Online]

Speaker

sonali bhatnagar

12:10–12:30

Impact of the Magnetic Horizon on the Interpretation of the Pierre Auger Observatory Spectrum and Composition Data [Online]

Speaker

Juan Manuel Gonzalez

13:00

Thursday 11 July

10:00

Contributed talks

Session | **Location:** Fiesta Americana, Puerto Vallarta | **Convener:** Hiroaki Menjo

10:00–10:20

Constraints from the Pierre Auger Observatory on BSM scenarios generating UHE ν_τ , τ , and τ -like particles

Speaker

Karl-Heinz Kampert

10:20–10:40

The complex nature of the abnormally weak absorption of cosmic ray hadrons in lead calorimeters at superhigh energies [Online]

Speaker

A.S. Borisov

10:40–11:00

Outreach Hyper-Kamiokande México

Speakers

Judith Torres Jiménez, Montserrat Montiel Dücker Romero

11:00

11:30

Contributed talks

Session | **Location:** Fiesta Americana, Puerto Vallarta | **Convener:** Dr Kazumasa Kawata

11:30–11:50

Calculation of Long Gamma-Ray Burst Pseudo-Redshifts using the Amati Correlation

Speaker

Gabriela Xol

11:50–12:10

On the correlation between X-rays and TeV gamma-rays in HBL Blazars

Speaker

Dr Jose Rodrigo Sacahui Reyes

12:10–12:30

Determination of Pseudo-redshifts to Long GRBs by the Guiriec Method [Online]

Speaker

Paula Yuc

13:00

15:30

Contributed talks

Session | **Location:** Fiesta Americana, Puerto Vallarta | **Convener:** Juan Carlos Arteaga

15:30–15:50

Cost Effective Large Area Gaseous Detectors for Detection of Charged Particles [Online]

Speaker

Dr Rajesh Ganai

15:50-16:10

Design, manufacturing and installation of multi-PMT vessel for Hyper-Kamiokande

Speaker

Brenda Elisa Medina Estrada

16:10

Friday 12 July

10:00

Contributed talks

Session | **Location:** Fiesta Americana, Puerto Vallarta | **Convener:** Dr Jose Rodrigo Sacahui Reyes

10:00–10:20

Unveiling New Physics with Tau Leptons: Innovative Approaches at Belle II

Speaker

Eduard De La Cruz Burelo

10:20