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

# Monday, 8 July 2024

## **Contributed talks** (17:00 - 18:40)

-Conveners: Sunil Gupta

time [id] title		presenter
17:00	[1] The Cosmic Ray Extremely Distributed Observatory (CREDO) [Online]	ALVAREZ CASTILLO, David Edwin
17:20	[53] POEMMA-Balloon with Radio: a balloon born Multi-Messenger Observatory	SCOTTI, Valentina
17:40	[13] Status and First Results from the KM3NeT neutrino telescope [Online]	DRAKOPOULOU, Evangelia
18:00	[54] The Giant Radio Array for Neutrino Detection - experimental status and plans	PIOTROWSKI, Lech Wiktor
18:20	[48] The Southern Wide-field Gamma Ray Observatory (SWGO)	CABALLERO MORA, KAREN SALOME

## Tuesday, 9 July 2024

### **Contributed talks** (10:00 - 11:00)

-Conveners: Lukas Nellen

time	[id] title	presenter
10:00	[29] Mean number of TeV muons in air showers measured with IceTop and IceCube	VERPOEST, Stef
10:20	[57] Top-Down reconstruction of extensive air showers: a method to quantify the rescaling of the muon signal of hadronic interaction models	CHEMINANT, Kevin
10:40	[38] A measurement of the muon number of extensive air showers from cosmic ray collisions using the data from KASCADE-Grande	ARTEAGA, Juan Carlos

### **Contributed talks** (11:30 - 13:00)

-Conveners: Rodrigo Gamboa Goñi

time	[id] title	presenter
	[58] Estimation of the cosmic-ray mass composition and proton-proton interaction cross sections from air shower data measured by the Pierre Auger Observatory [Online]	TKACHENKO, Olena
	[15] Investigating the hadron nature of high-energy photons with PeVatrons [Online]	DI SCIASCIO, Giuseppe
	[6] Neutrinos from muon-rich ultra high energy electromagnetic cascades: The MUNHECA code [Online]	ESMAEILI, AmirFarzan

### **Contributed talks** (15:30 - 16:10)

-Conveners: Antonella Castellina

time [id] title	presenter
15:30 [60] Neutron Production in Extensive Air Showers	ENGEL, Ralph
15:50 [61] Results from the first 8.5 years of operation with CALET	AKAIKE, Yosui

## **Contributed talks** (17:10 - 18:30)

#### -Conveners: Eduardo de la Fuente Acosta

time	[id] title	presenter
17:10	[14] High-energy Hadronic Interaction Models: Insights from the Pierre Auger Observatory	DA SILVA CONCEICAO, Ruben Mauricio
	[63] High Energy Neutrinos studies in the forward direction with the FASER experiment at the LHC	SATO, Osamu
17:50	[64] Machine learing model for discrimination of simulated muonic traces in water cherenkov detectors	BERAZAIN, Erick
18:10	[33] Neutrino Classification Through Deep Learning	ROMO FUENTES, María Fernanda

## Wednesday, 10 July 2024

## **Contributed talks** (10:00 - 11:00)

-Conveners: Sergey Ostapchenko

time [id] title	presenter
10:00 [39] EPOS LHC-R : up-to-date hadronic model for EAS simulations	Dr PIEROG, Tanguy
10:20 [5] Investigating Muon Content in Extensive Air Showers using Pythia 8	GAUDU, Chloé
10:40 [18] Hadronic Interactions in CRPropa with state-of-the-art generators	MOREJON, Leonel

### **Contributed talks** (11:30 - 13:00)

-Conveners: John Mathews

time	[id] title	presenter
11:30	[34] Production and propagation of secondary antinuclei in the Galaxy	GALICIA CRUZTITLA, Luis Fernando
	[8] Preliminary atmospheric effects through air showers at Agra using DEASA experiment [Online]	BHATNAGAR, sonali
12:10	[67] Impact of the Magnetic Horizon on the Interpretation of the Pierre Auger Observatory Spectrum and Composition Data [Online]	GONZALEZ, Juan Manuel

## Thursday, 11 July 2024

### **Contributed talks** (10:00 - 11:00)

-Conveners: Hiroaki Menjo

time	[id] title	presenter
	[37] Constraints from the Pierre Auger Observatory on BSM scenarios generating UHE nu_tau, tau, and tau-like particles	KAMPERT, Karl-Heinz
	[42] The complex nature of the abnormally weak absorption of cosmic ray hadrons in lead calorimeters at superhigh energies [Online]	BORISOV, A.S.
10:40	[47] Outreach Hyper-Kamiokande México	TORRES JIMÉNEZ, Judith MONTIEL DÜCKER ROMERO, Montserrat

## **Contributed talks** (11:30 - 13:00)

-Conveners: Kazumasa Kawata

time	[id] title	presenter
11:30	[32] Calculation of Long Gamma-Ray Burst Pseudo-Redshifts using the Amati Correlation	XOL, Gabriela
11:50	[21] On the correlation between X-rays and TeV gamma-rays in HBL Blazars	Dr SACAHUI REYES, Jose Rodrigo
12:10	[7] Determination of Pseudo-redshifts to Long GRBs by the Guiriec Method [Online]	YUC, Paula

## **Contributed talks** (15:30 - 16:10)

-Conveners: Juan Carlos Arteaga

time	[id] title	presenter
	[46] Cost Effective Large Area Gaseous Detectors for Detection of Charged Particles [Online]	Dr GANAI, Rajesh
	[26] Design, manufacturing and installation of multi-PMT vessel for Hyper-Kamiokande	MEDINA ESTRADA, Brenda Elisa

## **Friday, 12 July 2024**

### **Contributed talks** (10:00 - 10:20)

-Conveners: Jose Rodrigo Sacahui Reyes

time [id] title presenter

10:00 [25] Unveiling New Physics with Tau Leptons: Innovative Approaches at Belle II DE LA CRUZ BURELO, Eduard