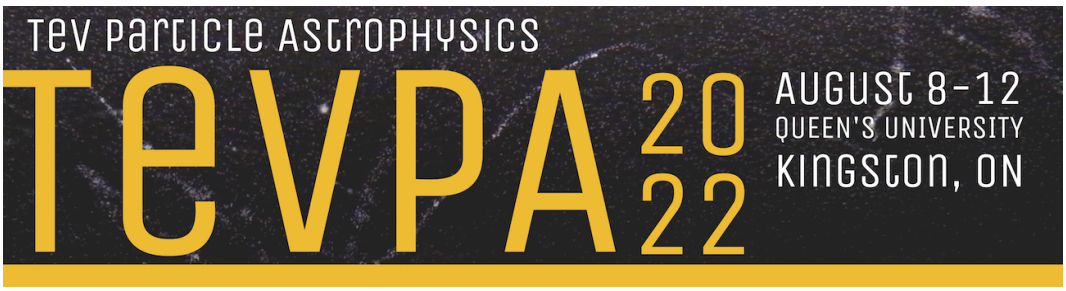
Program

Aug 8 – 12, 2022



TeVPA 2022

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Mon, August 8

8:00 AM **Mon, August 8** 8:00 – 8:45 AM

Registration
Session | **Location:** Biosciences Atrium

8:45 AM

8:45 AM **Mon, August 8** 8:45 – 9:00 AM

Welcome & Introductory remarks
Session

9:00 AM

9:00 AM **Mon, August 8** 9:00 – 10:00 AM

Plenary session: BioSci 1101
Session | **Location:** Biosciences 1101 | **Convener:** Rebecca Leane

9:00 – 9:30 AM **Dark Matter in Extreme Environments**

Speaker
Bradley Kavanagh

9:30 – 10:00 AM **Searches for new particles in bound solar orbits**

Speaker
Katelin Schutz

10:00 AM

10:00 AM **Mon, August 8** 10:00 – 10:30 AM

Coffee
Break

10:30 AM

10:30 AM **Mon, August 8** 10:30 AM – 12:00 PM

Plenary session: BioSci 1101
Session | **Location:** Biosciences 1101 | **Convener:** Dan Hooper

10:30 – 11:00 AM
Overview of the recent results and future developments of the Telescope Array experiment

Speaker
Eiji Kido

11:00 – 11:30 AM
Very to Ultra-High-Energy Gamma-ray Astrophysics with Ground-Based Particle Detection Arrays

Speaker
Petra Huentemeyer

11:30 AM – 12:00 PM **Latest results and the upgrade of the Pierre Auger Observatory**

Speaker
Fred Sarazin

12:00 PM

2:00 PM **Mon, August 8** 2:00 – 3:20 PM

Cosmic Rays: I - BioSci 1102

Session | **Convener:** Pedro De la Torre Luque

2:00 – 2:20 PM
Force-Field Model of Galactic Cosmic Ray Propagation in the Inner Heliosphere

Speaker
Jung-Tsung Li

2:20 – 2:40 PM
Precision Measurement of Daily Electron, Positron, Proton, and Helium Fluxes with the Alpha Magnetic Spectrometer

Speaker
Yi Jia

2:40 – 3:00 PM
Precision Measurement of the Monthly Proton, Helum, Carbon and Oxygen Fluxes in Cosmic Rays with the Alpha Magnetic Spectrometer on the International Space Station

Speaker
Federico Donnini

3:20 PM

2:00 PM **Mon, August 8** 2:00 – 3:20 PM

Cosmology: I - Stirling Auditorium

Session | **Convener:** Keir Rogers

2:00 – 2:20 PM
An Effective Field Theory of 21 cm Radiation with Redshift Space Distortions

Speaker
Wenzer Qin

2:20 – 2:40 PM
Hubble distancing: Focusing on distance measurements in cosmology

Speaker
Kylar Greene

2:40 – 3:00 PM **Intergalactic medium as a probe of fundamental physics**

Speaker
Anastasia Sokolenko

3:00 – 3:20 PM
A Poisson Log-Normal Framework for Cosmological Parameter Inference Using Dark Sirens

Speaker
J. Leo Kim

3:20 PM

2:00 PM **Mon, August 8** 2:00 – 3:20 PM

Dark Matter: I - BioSci 1101

Session | **Location:** BioSci 1101 | **Convener:** Ilias Cholis

2:00 – 2:20 PM **Mirror Stars and other probes of Dark Complexity**

Speaker
David Curtin

2:20 – 2:40 PM **Discovering Composite Dark Matter with the Migdal Effect**

Speaker
Javier Acevedo

2:40 – 3:00 PM
Primordial Black Hole Dark Matter in the Context of Extra Dimensions

Speaker
Avi Friedlander

3:00 – 3:20 PM **Q-monopole-ball: a topological and nontopological soliton**

Speaker
Nicholas Orlofsky

3:20 PM

2:00 PM **Mon, August 8** 2:00 – 3:20 PM

Galactic Sources: I - Chernoff Auditorium

Session | **Convener:** Lars Mohrmann

2:00 – 2:20 PM
Gamma-ray emission from young supernova remnants in dense, structured circumstellar environments

Speaker
Robert B.

2:20 – 2:40 PM **Supernova remnants at TeV energies with VERITAS**

Speaker
Sajan Kumar

2:40 – 3:00 PM
The formation of gamma-ray halos around supernova remnants through particle escape

Speaker
Robert B.

3:00 – 3:20 PM
Gone with the breeze: A subsonic solution to the Fermi bubbles problem

Speaker
Olivier Tourmente

3:20 PM

2:00 PM **Mon, August 8** 2:00 – 3:20 PM

Neutrinos: I - Humphrey Auditorium

Session | **Convener:** Shigeo Kimura

2:00 – 2:20 PM

Search for correlations between high-energy neutrinos and blazars with IceCube

Speaker
Cristina Lagunas Gualda

2:20 – 2:40 PM

Search for High-Energy Neutrinos from TDE-like Flares with IceCube

Speaker
Jannis David Necker

2:40 – 3:00 PM

Ultrahigh-energy cosmic-ray induced gamma-ray and neutrino fluxes from blazars

Speaker
Soebur Razzaque

3:00 – 3:20 PM

Propagation of Cosmic Rays in Plasmoids of AGN Jets-Implications for Multimessenger Predictions

Speaker
Ilja Jaroschewski

3:20 PM

3:20 PM **Mon, August 8** 3:20 – 3:50 PM

Coffee Break

Break

3:50 PM

3:50 PM **Mon, August 8** 3:50 – 5:10 PM

Dark Matter: II - BioSci 1101

Session | **Convener:** David Curtin

3:50 – 4:10 PM

Search for gamma-ray spectral lines from Dark Matter annihilation in the Galactic Centre region with MAGIC

Speaker
Daniel Kerszberg

4:10 – 4:30 PM

The Status of the Galactic Center Excess

Speaker
Dan Hooper

4:30 – 4:50 PM

Assessing the Impact of Hydrogen Absorption on the Characteristics of the Galactic Center Excess

Speaker
martin pohl

4:50 – 5:10 PM

Revisiting the Gamma-Ray Galactic Center Excess with Multi-Messenger Observations

Speaker
Ilias Cholis

5:10 PM

3:50 PM **Mon, August 8** 3:50 – 5:30 PM

Extragalactic Sources: I - Stirling Auditorium

Session | **Convener:** Alberto Berti

3:50 – 4:10 PM

A multi-wavelength spectral characterization of gamma-ray emitting extreme BL Lacertae blazar candidates hidden in Fermi-LAT data.

Speaker
Mireia Nievas

4:10 – 4:30 PM **Absorption features in gamma-ray spectra of BL Lac objects**

Speaker
Luca Foffano

4:30 – 4:50 PM

Multi-messenger characterization of Mrk501 during historically low X-ray and γ-ray activity

Speaker
Lea Alina Heckmann

4:50 – 5:10 PM **Multiwavelength observations of the extreme HBL H 1426+428**

Speaker
Stephan O'Brien

5:10 – 5:30 PM

High-energy gamma-rays from magnetically arrested disks in nearby radio galaxies

Speaker
RIku Kuze

5:30 PM

3:50 PM **Mon, August 8** 3:50 – 5:10 PM

Gamma Rays: I - BioSci 1102

Session | **Convener:** Marcel Strzys

3:50 – 4:10 PM

Unresolved sources naturally contribute to PeV γ-ray diffuse emission observed by Tibet ASγ

Speaker
Vittoria Vecchiotti

4:10 – 4:30 PM

Implications from 3-dimensional modeling of gamma-ray signatures in the Galactic Center

Speaker
Julien Dörner

4:30 – 4:50 PM
Comparison between PeVatron candidates in the HAWC and LHAASO Data Sets

Speaker
Xiaojie Wang

4:50 – 5:10 PM **HAWC Observations of Gamma rays from the Quiescent Sun**

Speaker
Mehr Un Nisa

5:10 PM

3:50 PM **Mon, August 8** 3:50 – 5:10 PM

Gravitational Wave and Multimessenger: I - Chernoff Auditorium

Session | **Convener:** Michael Fedderke

3:50 – 4:10 PM
Searching for Gamma- and hard X-ray Counterparts to Gravitational-wave events in GWTC-3 with Fermi-GBM and Swift-BAT

Speaker
Milena Crnogorcevic

4:10 – 4:30 PM
Recent updates on the VERITAS multimessenger program: searching for electromagnetic counterparts of high-energy neutrino and gravitational-wave events

Speaker
Weidong Jin

4:30 – 4:50 PM
Prediction of high-energy neutrino signals associated with gravitational waves: effects of kilonova photons

Speaker
Riki Matsui

4:50 – 5:10 PM **GW follow-up in the VHE domain with H.E.S.S.**

Speaker
Sylvia Jiechen Zhu

5:10 PM

3:50 PM **Mon, August 8** 3:50 – 5:10 PM

Neutrinos: II - Humphrey Auditorium

Session | **Convener:** Thomas McElroy

3:50 – 4:10 PM **Latest results from the CUORE experiment**

Speaker
Vivek Singh

4:10 – 4:30 PM
LEGEND-1000: a future ton-scale experiment for Neutrinoless Double Beta Decay

Speaker
Michele Morella

4:30 – 4:50 PM **Neutrino Oscillations with IceCube and the IceCube Upgrade**

Speaker
David Jason Koskinen

4:50 – 5:10 PM
MUTE: A Modern Calculation for Deep Underground and Underwater Muons

Speaker
Marie-Cécile Piro

5:10 PM

5:30 PM **Mon, August 8** 5:30 – 7:00 PM

Social at Agnes Etherington Art Centre
Break

7:00 PM

Tue, August 9

9:00 AM **Tue, August 9** 9:00 – 10:00 AM

Plenary session: BioSci 1101

Session | **Location:** Biosciences 1101 | **Convener:** Carlos A. Argüelles-Delgado

9:00 – 9:30 AM **The ANTARES adventure**

Speaker
Antoine David Kouchner

9:30 – 10:00 AM **A decade of discoveries with Cherenkov neutrino telescopes**

Speaker
Lu Lu

10:00 AM

10:00 AM **Tue, August 9** 10:00 – 10:30 AM

Coffee

Break

10:30 AM

10:30 AM **Tue, August 9** 10:30 AM – 12:00 PM

Plenary session: BioSci 1101

Session | **Location:** Biosciences 1101 | **Convener:** Martin Pohl

10:30 – 11:00 AM **High-Energy Neutrinos: A New Trail Towards New Physics**

Speaker
Carlos A. Argüelles-Delgado

11:00 – 11:30 AM
Neutrinos from blazars five years after the IC170922A / TXS0506+056 event

Speaker
Matteo Cerruti

11:30 AM – 12:00 PM
Young Stellar Clusters: a new player in the field of Cosmic Ray origin

Speaker
Giovanni Morlino

12:00 PM

2:00 PM **Tue, August 9** 2:00 – 3:20 PM

Cosmic Rays: II - BioSci 1101

Session | **Convener:** Morlino Giovanni

2:00 – 2:20 PM **The FLUKA cross sections for cosmic-ray propagation studies**

Speaker
Pedro De la Torre Luque

2:20 – 2:40 PM **Isotopic composition of cosmic rays with the HELIX balloon project**

Speaker
Keith McBride

2:40 – 3:00 PM
Unique Properties of Secondary Cosmic Rays: Results from the Alpha Magneti Spectrometer

Speaker
Yao Chen

3:00 – 3:20 PM **Unique Properties of Cosmic H, He, Li and Be Isotopes**

Speaker
Jiahui Wei

3:20 PM

2:00 PM **Tue, August 9** 2:00 – 3:20 PM

Dark Matter: III - Stirling Auditorium

Session | **Convener:** Seodong Shin

2:00 – 2:20 PM **Searching for Dark Matter with the DAMIC at SNOLAB Experiment**

Speaker
Ian Lawson

2:20 – 2:40 PM **General Dark Matter-Electron Interactions in Detector Materials**

Speaker
Einar Urdshals

2:40 – 3:00 PM
Dark Matter from Monogem: Constraints on Velocity-Dependent Dark Matter-Nucleus Scattering

Speaker
Christopher Cappiello

3:00 – 3:20 PM **Cosmic-ray Neutrino Boosted Dark Matter (νBDM)**

Speaker
Jong-Chul Park

3:20 PM

2:00 PM **Tue, August 9** 2:00 – 3:20 PM

Dark Matter: IV - Chernoff Auditorium

Session | **Location:** Chernoff Auditorium | **Convener:** Daniel Gilman

2:00 – 2:20 PM
A machine learning approach to searching dark matter subhalos in Fermi-LAT sources

Speaker
Kathrin Nippel

2:20 – 2:40 PM
Combined dark matter searches towards dwarf spheroidal galaxies with Fermi-LAT, HAWC, H.E.S.S., MAGIC, and VERITAS

Speaker
Celine Armand

2:40 – 3:00 PM
Constraining Dark Matter Decays at the keV Scale with the NuSTAR Observatory

Speaker
Brandon Roach

3:00 – 3:20 PM
Searching for Secluded Dark Matter with Present and Future Gamma-ray Observatories

Speaker
Aion Viana

3:20 PM

2:00 PM **Tue, August 9** 2:00 – 3:20 PM

Extragalactic Sources: II - Humphrey Auditorium

Session | **Convener:** Cecilia Lunardini

2:00 – 2:20 PM
Electron pre-acceleration through Stochastic Shock Drift Acceleration at shocks in merging galaxy clusters

Speaker
Jacek Niemiec

2:20 – 2:40 PM
Gamma-ray and neutrino emissions from star-forming and starburst galaxies

Speaker
Marco Chianese

2:40 – 3:00 PM
Gamma-ray and neutrino emission from radiatively inefficient accretion flows

Speaker
Shigeo Kimura

3:00 – 3:20 PM **VERITAS Observations of Fast Radio Bursts**

Speaker
Matthew Lundy

3:20 PM

2:00 PM **Tue, August 9** 2:00 – 3:20 PM

Neutrinos: III - BioSci 1102

Session | **Convener:** steven prohira

2:00 – 2:20 PM **Tau Appearance from High-Energy Neutrino Interactions**

Speaker
Pavel Zhelnin

2:20 – 2:40 PM
A model independent framework for measuring the neutrino-nucleon cross section at UHE neutrino detectors

Speaker
steven prohira

2:40 – 3:00 PM
Point sources of ultra-high-energy neutrinos: minimalist predictions for near-future discovery

Speaker
Damiano Fiorillo

3:00 – 3:20 PM **Exploring neutrino-matter interactions at the EeV energy frontier**

Speaker
Victor Branco Valera Baca

3:20 PM

3:20 PM **Tue, August 9** 3:20 – 3:50 PM

Coffee
Break

3:50 PM

3:50 PM **Tue, August 9** 3:50 – 5:10 PM

Cosmic Rays: III - BioSci 1101
Session | **Convener:** Francesca Giovacchini

3:50 – 4:10 PM
Unique Properties of Primary Cosmic Rays: Results from the Alpha Magnetic Spectrometer

Speaker
Yi Jia

4:10 – 4:30 PM
Unique Properties of the 3rd Group of Cosmic Rays: Results from the Alpha Magnetic Spectrometer

Speaker
Valerio Formato

4:30 – 4:50 PM
Testing the universality of cosmic-ray nuclei from protons to oxygen with AMS-02

Speaker
Michael Korsmeier

4:50 – 5:10 PM **The High Energy cosmic Radiation Detector**

Speaker
Valerio Formato

5:10 PM

3:50 PM **Tue, August 9** 3:50 – 5:10 PM

Dark Matter: V - Stirling Auditorium
Session | **Convener:** Christopher Cappiello

3:50 – 4:10 PM **Signatures of primordial black hole dark matter at DUNE and THEIA**

Speaker
Valentina De Romeri

4:10 – 4:30 PM
Direct detection of light new species from evaporating primordial black holes

Speaker
Marco Chianese

4:30 – 4:50 PM **Hidden dynamics of a sub-component dark matter**

Speaker
Seodong Shin

4:50 – 5:10 PM **Ab initio calculations of structure factors for dark matter searches**

Speaker
Baishan Hu

5:10 PM

3:50 PM **Tue, August 9** 3:50 – 5:30 PM

Dark Matter: VI - Chernoff Auditorium

Session | **Location:** Chernoff Auditorium | **Convener:** Aion Viana

3:50 – 4:10 PM
Constraining resonant dark matter self-interactions with strong gravitational lenses

Speaker
Daniel Gilman

4:10 – 4:30 PM **Using small-scale lensing anisotropies to constrain dark matter.**

Speaker
Birendra Dhanasingham

4:30 – 4:50 PM
Searching for the fundamental nature of dark matter in the cosmic large-scale structure

Speaker
Keir Rogers

4:50 – 5:10 PM **Jeans Model Beyond Spherical Symmetry**

Speaker
Adam Smith-Orlik

5:10 – 5:30 PM
Measuring dark matter subhalos in strong lenses with truncated marginal neural ratio estimation

Speaker
Adam Coogan

5:30 PM

3:50 PM **Tue, August 9** 3:50 – 5:10 PM

Gamma Rays: II - Humphrey Auditorium

Session | **Convener:** Stephan O'Brien

3:50 – 4:10 PM
First Science Results from the Large-Sized Telescope prototype for The Cherenkov Telescope Array

Speaker
David Green

4:10 – 4:30 PM **The SST-1M gamma-ray mini-array - results of early operations**

Speaker
Jacek Niemiec

4:30 – 4:50 PM
Status, performance and results of the Large-Sized Telescope prototype for the Cherenkov Telescope Array

Speaker
Daniel Kerszberg

4:50 – 5:10 PM **Southern Wide-field Gamma-ray Observatory (SWGO)**

Speaker
Andrew Smith

5:10 PM

3:50 PM **Tue, August 9** 3:50 – 5:10 PM

Neutrinos: IV - BioSci 1102

Session | **Convener:** Soebur Razzaque

3:50 – 4:10 PM **IceCube Matter-Enhanced Sterile Neutrino Searches**

Speaker
Benjamin Smithers

4:10 – 4:30 PM **Simulating neutrino echoes induced by secret neutrino interactions**

Speaker
Jose Carpio

4:30 – 4:50 PM
Towards Powerful Probes of Neutrino Self-Interactions in Supernovae

Speaker
Po Wen Chang

5:10 PM

Wed, August 10

9:00 AM **Wed, August 10** 9:00 – 10:00 AM

Plenary session

Session | **Location:** Biosciences 1101 | **Convener:** Guillaume Giroux

9:00 – 9:30 AM

Search for "Light" Dark Matter and CEvNS with NEWS-G and SBC experiments

Speaker
Marie Cécile Piro

9:30 – 10:00 AM **Direct detection of dark matter at higher masses**

Speaker
Hugh Lippincott

10:00 AM

10:00 AM **Wed, August 10** 10:00 – 10:30 AM

Coffee

Break

10:30 AM

10:30 AM **Wed, August 10** 10:30 AM – 12:00 PM

Plenary session

Session | **Location:** Biosciences 1101 | **Convener:** Bradley Kavanagh

10:30 – 11:00 AM **Dark Matter in Celestial Objects**

Speaker
Rebecca Leane

11:00 – 11:30 AM **Direct Detection of Low Mass Fast Moving Dark Matter**

Speaker
Gopolang Mohlabeng

11:30 AM – 12:00 PM **Cosmology and Fundamental Physics with (Extreme) Blazars**

Speaker
Mireia Nievas

12:00 PM

2:00 PM **Wed, August 10** 2:00 – 3:20 PM

Cosmic Rays: IV - Stirling Auditorium

Session | **Convener:** Valerio Formato

2:00 – 2:20 PM **Direct Detection of TeV—PeV Cosmic Rays in Space**

Speaker
Andrii Tykhonov

2:20 – 2:40 PM

Potential measurement of the primary cosmic-ray proton spectrum between 40 TeV and a few hundred TeV with the Tibet hybrid experiment (Tibet-III + MD)

Speaker
katayose yusaku

2:40 – 3:00 PM

The Surface Array Enhancement of the IceCube Neutrino Observatory

Speaker
Dennis Soldin

3:00 – 3:20 PM

Observation of Cosmic-Ray Anisotropy with Ten Years of IceCube Data

Speaker
Frank McNally

3:20 PM

2:00 PM **Wed, August 10** 2:00 – 3:20 PM

Dark Matter: VII - BioSci 1101

Session | **Convener:** Erez Etzion

2:00 – 2:20 PM

The NEWS-G light Dark Matter search experiment: Results of a methane gas physics campaign

Speaker
Daniel Durnford

2:20 – 2:40 PM **Latest results from DEAP-3600**

Speaker
Simon Viel

2:40 – 3:00 PM **DarkSide-20k experiment and its veto**

Speaker
Marek Bohdan Walczak

3:00 – 3:20 PM **The DarkSide-20k TPC and underground argon cryogenic system**

Speaker
Thomas Nathan Thorpe

3:20 PM

2:00 PM **Wed, August 10** 2:00 – 3:20 PM

Dark Matter: VIII - BioSci 1102

Session | **Convener:** Tomas Gonzalo

2:00 – 2:20 PM

A new path for dark matter searches: cross-correlation between gamma rays and gravitational tracers

Speaker
Elena Pinetti

2:20 – 2:40 PM **Simulation and Indirect Detection of Dark Glueball Showers**

Speaker
Caleb Gemmell

2:40 – 3:00 PM
Impact of the particle physics model on dark matter indirect detection limits

Speaker
Celine Armand

3:00 – 3:20 PM **Warm dark matter searches from the Galactic halo**

Speaker
Ariane Dekker

3:20 PM

2:00 PM **Wed, August 10** 2:00 – 3:20 PM

Extragalactic Sources: III - Chernoff Auditorium

Session | **Convener:** Matteo Cerruti

2:00 – 2:20 PM
A robust lower bound on intergalactic magnetic fields from Fermi/LAT and MAGIC observations of 1ES 0229+200

Speaker
Ievgen Vovk

2:20 – 2:40 PM
Intergalactic magnetic field studies by means of the gamma-ray emission from GRB 190114C

Speaker
Paolo Da Vela

2:40 – 3:00 PM **Galactic halo magnetic fields and UHECRs deflections**

Speaker
Vasundhara Shaw

3:00 – 3:20 PM
Constraining Axion-Like Particles with HAWC Observations of TeV Blazars

Speaker
Sunniva Jacobsen

3:20 PM

2:00 PM **Wed, August 10** 2:00 – 3:00 PM

Neutrinos: V - Humphrey Auditorium

Session | **Convener:** Qinrui Liu

2:00 – 2:20 PM
Measurement of the Astrophysical Diffuse Flux Spectrum using Muon Neutrino Events with a Contained Vertex in IceCube

Speaker
Manuel Silva

2:20 – 2:40 PM
A combined analysis of the diffuse astrophysical neutrino flux using IceCube's high-energy through-going muon tracks and cascades

Speaker
Erik Ganster

2:40 – 3:00 PM
Methods for a consistent treatment of systematic uncertainties in a combined analysis of IceCube's high energy neutrino data

Speaker
Richard Naab

3:00 PM

3:20 PM **Wed, August 10** 3:20 – 3:50 PM

Coffee
Break

3:50 PM

3:50 PM **Wed, August 10** 3:50 – 5:10 PM

Cosmic Rays: V - Stirling Auditorium
Session | **Convener:** Yi Jia

3:50 – 4:10 PM **Properties of Heavy Nuclei in South Atlantic Anomaly region**

Speaker
Francesca Giovacchini

4:10 – 4:30 PM
The mechanism of efficient electron acceleration at parallel non-relativistic shocks

Speaker
Mohamad Shalaby

4:30 – 4:50 PM **Towards Understanding the Origin of Cosmic-Ray Positrons**

Speaker
Zhili Weng

4:50 – 5:10 PM
Antiproton Flux and Properties of Elementary Particle Fluxes in Primary Cosmic Rays Measured with the Alpha Magnetic Spectrometer on the ISS

Speaker
Zhili Weng

5:10 PM

3:50 PM **Wed, August 10** 3:50 – 5:30 PM

Dark Matter: IX - BioSci 1101
Session | **Convener:** Marco Chianese

3:50 – 4:10 PM
The CYGNO experiment, a directional detector for direct Dark Matter searches

Speaker
David J. G. Marques

4:10 – 4:30 PM **Search for Dark Matter with the PICO Experiment**

Speaker
Guillaume Giroux

4:30 – 4:50 PM **Hunting for Sub-GeV DM with the SENSEI experiment**

Speaker
Erez Etzion

4:50 – 5:10 PM
The SABRE South Experiment at the Stawell Underground Physics Laboratory

Speaker
William Melbourne

5:10 – 5:30 PM
The KDK experiment: measuring a rare decay of potassium relevant to dark matter searches

Speaker
Philippe Di Stefano

5:30 PM

3:50 PM **Wed, August 10** 3:50 – 5:10 PM

Dark Matter: X - BioSci 1102

Session | **Convener:** Elena Pinetti

4:10 – 4:30 PM
Constraining axion-like particles with the diffuse gamma-ray flux measured by the Large High Altitude Air Shower Observatory

Speaker
Leonardo Mastrototaro

4:30 – 4:50 PM **Searching for Axionlike Particles from Gamma-ray Bursts with Fermi**

Speaker
Milena Crnogorcevic

4:50 – 5:10 PM **A global analysis of decaying ALPs**

Speaker
Tomas Gonzalo

5:10 PM

3:50 PM **Wed, August 10** 3:50 – 5:10 PM

Galactic Sources: II - Chernoff Auditorium

Session | **Convener:** Robert B.

3:50 – 4:10 PM **Searching for TeV emission from Galactic PeVatrons with VERITAS**

Speaker
Bangale P., for the VERITAS Collaboration.

4:10 – 4:30 PM
Multi-wavelength study of the galactic PeVatron candidate LHAASO J2108+5157

Speaker
Jakub Jurysek

4:30 – 4:50 PM

MAGIC observations of the putative PeVatron SNR G106.3+2.7 in the proximity of the Boomerang PWN

Speakers
Marcel Strzys, Marcel Strzys

4:50 – 5:10 PM

Broadband X-ray Study of the Galactic Microquasar W50/SS433, a Galactic PeVatron Candidate

Speaker
Brydyn Mac Intyre

5:10 PM

3:50 PM **Wed, August 10** 3:50 – 4:50 PM

Neutrinos: VI - Humphrey Auditorium

Session | **Convener:** Lu Lu

3:50 – 4:10 PM

Galactic and Extragalactic Southern Sky Neutrino Source Searches with IceCube Starting Track Events in the 1 to 100 TeV Energy Range.

Speaker
Sarah Mancina

4:10 – 4:30 PM **Neutrino Astronomy with KM3NeT/ARCA**

Speaker
Rasa Muller

4:30 – 4:50 PM **The Pacific Ocean Neutrino Experiment**

Speaker
Thomas McElroy

4:50 PM

Thu, August 11

9:00 AM **Thu, August 11** 9:00 – 10:00 AM

Plenary session

Session | **Location:** Biosciences 1101 | **Convener:** Jamie Holder

9:00 – 9:30 AM

The All-sky Medium-Energy Gamma-ray Observatory eXplorer: AMEGO-X

Speaker
Jeremy Perkins

9:30 – 10:00 AM

Measurements of Galactic Gamma-Ray Sources with Imaging Atmospheric Cherenkov Telescopes

Speaker
Lars Mohrmann

10:00 AM

10:00 AM **Thu, August 11** 10:00 – 10:30 AM

Coffee

Break

10:30 AM

10:30 AM **Thu, August 11** 10:30 AM – 12:00 PM

Plenary session

Session | **Location:** Biosciences 1101 | **Convener:** Antoine David Kouchner

10:30 – 11:00 AM

Neutrinos and Cosmic rays from Tidal Disruption Events

Speaker
Cecilia Lunardini

11:00 – 11:30 AM

Precision neutrino physics with liquid scintillator detectors

Speaker
Gabriel Orebi Gann

11:30 AM – 12:00 PM

Radio Detection of Ultra-High Energy Neutrinos

Speaker
Abigail Vieregg

12:00 PM

2:00 PM **Thu, August 11** 2:00 – 3:20 PM

Dark Matter: XI - Chernoff Auditorium

Session | **Convener:** Marco Taoso

2:00 – 2:20 PM

Search for dark matter signatures with ANTARES and KM3NeT

Speaker
Sara Rebecca Gozzini

2:20 – 2:40 PM **Dark Matter decay to neutrinos**

Speaker
Diyaselis Delgado Lopez

2:40 – 3:00 PM
Global fit of Non-relativistic Effective Operator Dark Matter using Solar Neutrinos

Speaker
Neal Avis Kozar

3:00 – 3:20 PM **Dark Matter-neutrino interactions through a one-loop diagram**

Speaker
Karen Macías Cárdenas

3:20 PM

2:00 PM **Thu, August 11** 2:00 – 3:20 PM

Dark Matter: XII - Stirling Auditorium

Session | **Convener:** Philip Von Doetinchem

2:00 – 2:20 PM **Velocity-dependent dark matter annihilation from simulations**

Speaker
Nassim Bozorgnia

2:20 – 2:40 PM **Dark Matter Annihilations in Massive Stars: A New Lease on Life?**

Speaker
Joshua Ziegler

2:40 – 3:00 PM
Faint light of old neutron stars from dark matter capture and detectability at the James Webb Space Telescope

Speaker
Shiuli Chatterjee

3:20 PM

2:00 PM **Thu, August 11** 2:00 – 3:20 PM

Extragalactic Sources: IV - BioSci 1102

Session | **Convener:** Jeremy Perkins

2:00 – 2:20 PM **The MAGIC view of gamma-ray bursts at very high energies**

Speaker
Alessio Berti

2:20 – 2:40 PM **Probing the multiwavelength emission scenario of GRB 190114C**

Speaker
Sylvia Jiechen Zhu

2:40 – 3:00 PM
A preliminary population study of gamma ray bursts detected in the very high energy domain

Speaker
Davide Miceli

3:00 – 3:20 PM
Closing In on The MeV Gap - An Introduction to Compton Spectrometer and Imager (COSI)

Speaker
Jarred Roberts

3:20 PM

2:00 PM **Thu, August 11** 2:00 – 3:20 PM

Galactic Sources: III - Humphrey Auditorium

Session | **Convener:** Julian Sitarek

2:00 – 2:20 PM **Spectrum of Pairs injected by Geminga into the Interstellar Medium**

Speaker
Benedikt Schroer

2:20 – 2:40 PM **VERITAS observations of gamma-ray binary systems.**

Speaker
Jamie Holder

2:40 – 3:00 PM **Anisotropic diffusion cannot explain TeV halos**

Speaker
Pedro De la Torre Luque

3:00 – 3:20 PM
Analysis of High-mass X-ray Binary LS 5339 at Highest energy with HAWC

Speaker
Dezhi Huang

3:20 PM

2:00 PM **Thu, August 11** 2:00 – 3:20 PM

Gravitational Wave and Multimessenger: II - BioSci 1101

Session | **Convener:** Weidong Jin

2:00 – 2:20 PM **Astrometric Gravitational-Wave Detection via Stellar Interferometry**

Speaker
Michael A. Fedderke

2:20 – 2:40 PM
Searches for IceCube-neutrino counterparts to gravitational wave events

Speaker
Aswathi Balagopal V.

2:40 – 3:00 PM
Neutrino Emission during Supermassive and stellar mass Binary Black Hole Mergers

Speaker
Ilja Jaroschewski

3:00 – 3:20 PM

Neutrino follow-up with the Zwicky Transient Facility: Results from the first 24 campaigns

Speaker
Robert Stein

3:20 PM

3:20 PM **Thu, August 11** 3:20 – 3:50 PM

Coffee
Break

3:50 PM

3:50 PM **Thu, August 11** 3:50 – 5:30 PM

Dark Matter: XIII - Chernoff Auditorium
Session | **Convener:** Sara Rebecca Gozzini

3:50 – 4:10 PM

Novel Model Independent Constraints on Dark Matter and Cosmic Neutrinos

Speaker
Yu-Dai Tsai

4:10 – 4:30 PM

Global fits of s-channel simplified models for dark matter with GAMBIT

Speaker
Christopher Chang

4:30 – 4:50 PM **The semi-visible dark photon**

Speaker
Matheus Hostert

4:50 – 5:10 PM

Searching for inelastic dark matter with future laboratory experiments

Speaker
Marco Taoso

5:10 – 5:30 PM **First dark matter search result from the LZ experiment**

Speaker
Sam Eriksen

5:30 PM

3:50 PM **Thu, August 11** 3:50 – 5:10 PM

Dark Matter: XIV - Stirling Auditorium
Session | **Convener:** Nassim Bozorgnia

3:50 – 4:10 PM **Cosmology of Atomic Dark Matter with CLASS**

Speaker
Jared Barron

4:10 – 4:30 PM

The General AntiParticle Spectrometer - Search for Dark Matter using Cosmic-ray Antinuclei

Speaker
Philip Von Doetinchem

4:30 – 4:50 PM **Axion dark matter-induced echo of supernova remnants**

Speaker
Yitian Sun

4:50 – 5:10 PM **Towards Understanding the Origin of Cosmic-Ray Electrons**

Speakers
Valerio Vagelli, Valerio Vagelli

5:10 PM

3:50 PM **Thu, August 11** 3:50 – 5:10 PM

Galactic Sources: IV - Humphrey Auditorium

Session | **Convener:** Sajan Kumar

3:50 – 4:10 PM **Where are hadronic PeVatrons? – Constraints and Prospects**

Speaker
Takahiro Sudoh

4:10 – 4:30 PM **TeV neutrinos from dense winds in Novae**

Speaker
Wlodek Bednarek

4:30 – 4:50 PM

Hadronic origin of gamma-ray emission from nova RS Oph revealed by the MAGIC telescopes

Speaker
Julian Sitarek

4:50 – 5:10 PM

Detection of very-high-energy gamma rays from RS Ophiuchi by the prototype Large-Sized Telescope for the Cherenkov Telescope Array

Speaker
Yukiho Kobayashi

5:10 PM

3:50 PM **Thu, August 11** 3:50 – 4:50 PM

Neutrinos: VII - BioSci 1101

Session | **Convener:** Abigail Vieregg

3:50 – 4:10 PM **Status of the Radar Echo Telescope**

Speaker
steven prohira

4:10 – 4:30 PM

Direction Reconstruction for the Radar Echo Telescope for Neutrinos (RET-N)

Speaker
Dylan Frikken

4:30 – 4:50 PM **Recent progress towards a 5-station neutrino search with ARA**

Speaker
Marco Muzio

4:50 PM

3:50 PM **Thu, August 11** 3:50 – 4:50 PM

Particle Physics: I - BioSci 1102

Session | **Convener:** Javier Fernández Acevedo

3:50 – 4:10 PM

Electromagnetic radiation from axion condensates in a time dependent magnetic field

Speaker
Lars Sivertsen

4:10 – 4:30 PM **GAMBIT update**

Speaker
Csaba Balazs

4:30 – 4:50 PM **Flavor and CP Violation from a QCD-like Hidden Sector**

Speaker
Wafia Bensalem

4:50 PM

6:30 PM **Thu, August 11** 6:30 – 8:30 PM

Banquet at Isabel Bader Centre for the Performing Arts

Break

8:30 PM

Fri, August 12

9:00 AM **Fri, August 12** 9:00 – 10:00 AM

Plenary session

Session | **Location:** Biosciences 1101 | **Convener:** Arthur McDonald

9:00 – 9:30 AM **Counting your dark matter halos**

Speaker
Annika Peter

9:30 – 10:00 AM **The Universe as a Lab for Dark Matter Physics**

Speaker
Cora Dvorkin

10:00 AM

10:00 AM **Fri, August 12** 10:00 – 10:30 AM

Coffee

Break

10:30 AM

10:30 AM **Fri, August 12** 10:30 AM – 12:00 PM

Plenary session

Session | **Location:** Biosciences 1101 | **Convener:** Katelin Schutz

10:30 – 11:00 AM
Cusps, Cores and Kinematics: Modelling Gas in Galaxies to Measure Dark Matter

Speaker
Kristine Spekkens

11:00 – 11:30 AM
Astroparticle Physics with the Forward Physics Facility at the High-Luminosity LHC

Speaker
Dennis Soldin

11:30 AM – 12:00 PM
Pulsar Timing Arrays: The Next Window to Open on the Gravitational-Wave Universe

Speaker
Chiara Mingarelli

12:00 PM

12:00 PM **Fri, August 12** 12:00 – 12:30 PM

Plenary session: Closing remarks

Session | **Location:** Biosciences 1101 | **Conveners:** Joseph Bramante, Nahee Park, Aaron Vincent

12:30 PM