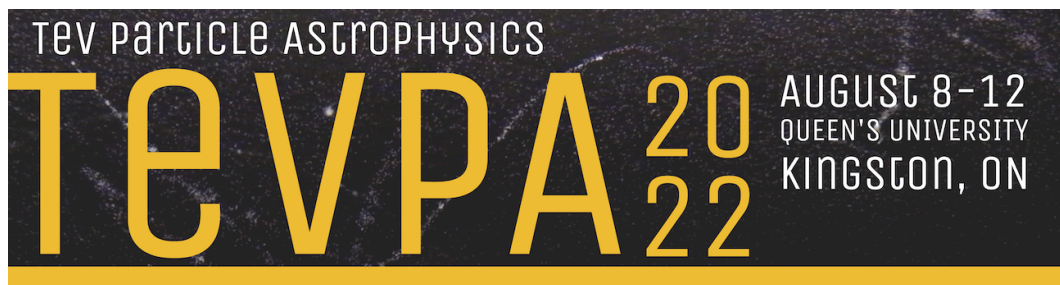


Session Program

Aug 8 - 12, 2022



TeVPA 2022

Dark Matter

Mon, August 8

2:00 PM

Dark Matter: I - BioSci 1101

Session | Location: BioSci 1101 | Convener: Dr 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

Mr 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

Dr Nicholas Orlofsky

3:20 PM

3:50 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

Dr Ilias Cholis

5:10 PM

Tue, August 9

2:00 PM

Dark Matter: III - Stirling Auditorium

Session | Convener: Prof. Seodong Shin

2:00 - 2:20 PM

Searching for Dark Matter with the DAMIC at SNOLAB Experiment

Speaker

Dr 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 (ν BDM)

Speaker

Prof. Jong-Chul Park

3:20 PM

2:00 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

Mr 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

3:50 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**

Dr Marco Chianese

4:30 - 4:50 PM

Hidden dynamics of a sub-component dark matter**Speaker**

Dr Seodong Shin

4:50 - 5:10 PM

Ab initio calculations of structure factors for dark matter searches**Speaker**

Dr Baishan Hu

5:10 PM

3:50 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**

Dr Daniel Gilman

4:10 - 4:30 PM

Using small-scale lensing anisotropies to constrain dark matter.**Speaker**

Mr 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

Wed, August 10

2:00 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

Mr 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

Dark Matter: VIII - BioSci 1102

Session | Convener: Dr 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

3:50 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**

Mr 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

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**

Dr Tomas Gonzalo

5:10 PM

Thu, August 11

2:00 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

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

3:50 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

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

Dr Valerio Vagelli, Valerio Vagelli

5:10 PM