

Session Program

26-30 Jun 2023

PASCOS 2023

Parallel

ISEB, 1010

Monday 26 June

14:20

Parallel: Cosmology I

Session | Location: ISEB, 1310 | Convener: Daniel Chung

14:20–14:40

Gravitational wave background from vacuum and thermal fluctuations during axion-like inflation

Speaker

Philipp Klose

14:40–15:00

Dissipative Genesis of the Inflationary Universe

Speaker

Dr Takahiro Terada

15:00

14:20

Parallel: Dark Matter I

Session | Location: ISEB, 1010 | Convener: Prof. Manfred Lindner

14:20–14:40

From SuperMAG to SNIPE Hunt: Using the Earth to search for ultralight dark matter

Speaker

Saarik Kalia

14:40–15:00

XENONnT: The First Results

Speaker

Jacques Pienaar

15:00

14:20

Parallel: Particle I

Session | Location: ISEB, 1200 | Convener: Prof. Stuart Raby

14:20–14:40

Probing Minimal Grand Unification through Gravitational Waves

Speaker

shaikh saad

14:40–15:00

Realistic SU(5) GUT with lower dimensional representations

Speaker

Kevin Hinze

15:00

15:20

Parallel: Cosmology II

Session | Location: ISEB, 1310 | Convener: Susha Louise Parameswaran

15:20–15:40

Quantum cosmology, eternal inflation, and swampland conjectures

Speaker

George Fanaras

15:40–16:00

Dynamical consistency conditions for rapid turn inflation

16:00	<p>Speaker Prof. Lilia Anguelova</p>
15:20	<p>Parallel: Dark Matter II Session Location: ISEB, 1010 Convener: Prof. Henry Sobel</p>
	<p>15:20–15:40 Axion dark matter echoes: a global analysis of astrophysical sources</p> <p>Speaker Yitian Sun</p>
16:00	<p>15:40–16:00 Gravitational wave signals of ultralight axion dark matter</p> <p>Speaker Prof. Fa Peng Huang</p>
15:20	<p>Parallel: Particle II Session Location: ISEB, 1200 Convener: Yu-Dai Tsai</p>
	<p>15:20–15:40 Latest results from the CUORE experiment</p> <p>Speaker The CUORE Collaboration</p>
16:00	<p>15:40–16:00 Recent results of the CONUS experiment</p> <p>Speaker Janina Hakenmüller</p>

Tuesday 27 June

14:20

Parallel: Cosmology III

Session | Location: ISEB, 1310 | Convener: Julian Heeck

14:20–14:40 **Is Cosmic Birefringence model-dependent?**

Speaker

Lu Yin

14:40–15:00 **An SZ-Like Effect on Stochastic Gravitational Wave Backgrounds**

Speaker

Marcell Howard

15:00–15:20

Affleck-Dine leptogenesis with one loop neutrino masses and a solution to the strong CP problem

Speaker

Nobuchika Okada

15:20

14:20

Parallel: Dark Matter III

Session | Location: ISEB, 1010 | Convener: Dave Casper

14:20–14:40 **Neutrino Mass Ordering from Discrete Flavor Symmetry**

Speaker

Omar Medina

14:40–15:00

Resurrecting Hitomi for X-ray Probes of Sterile Neutrino and Axion-Like-Particle Dark Matter with Blank Sky Observations

Speaker

Orion Ning

15:00–15:20

Precise Estimate of Decay of Charged Fermion in Electroweak-Charged Dark Matter Model

Speaker

Satoshi Shirai

15:20

14:20

Parallel: Particle III

Session | Location: ISEB, 1200 | Convener: Ryuichiro Kitano

14:20–14:40 **Electromagnetic interaction and freeze-out abundance of sexaquarks**

Speaker

Marianne Moore

14:40–15:00 **Dispersive determination of Higgs boson mass**

Speaker

Prof. Hsiang-nan Li

15:20

15:00-15:20

eV-scale sterile neutrino searches with reactor neutrino experiment PROSPECT

Speaker
Xiaobin Lu

15:40

Parallel: Dark matter IV

Session | **Location:** ISEB, 1010 | **Convener:** Brian Shuve

15:40-16:00

Light Dark Matter Search with Nitrogen-Vacancy Centers in Diamonds

Speaker
So Chigusa

16:00-16:20

`DarkPACK`: A modular software to compute BSM squared amplitudes for particle physics and dark matter observables

Speaker
Marco Palmiotta

16:20-16:40

Electron mass variation from dark sector interactions and compatibility with cosmological observations

Speaker
Yo Toda

16:40-17:00

Constraints on axion-like polarization oscillations in the cosmic microwave background with POLARBEAR

Speaker
Jacob Spisak

17:00

15:40

Parallel: Particle IV

Session | **Location:** ISEB, 1200 | **Convener:** Daniel Stolarski

15:40-16:00

g-2 Model Building with Portal Matter

Speaker
GEORGE WOJCIK

16:00-16:20

How to find the Feynman Rules from any scalar-tensor theory and not collapse in the process

Speaker
Sergio Seivillano

16:20-16:40

Measuring neutrino dynamics in NMSSM with a right-handed sneutrino LSP at the ILC

Speaker
YI LIU

16:40-17:00

Exploring New Physics Signatures in an Alternative Left-Right Model

Speaker
Dr Supriya Senapati

17:00

15:40

Parallel: Strings/formal I**Session** | **Location:** ISEB, 1310 | **Convener:** Saul Ramos-Sanchez

15:40-16:00

Dark Matter p-wave Annihilation Flux Enhancement Near the Supermassive Black Hole at the Center of M87***Speaker**

Mehrdad Phoroutan-Mehr

16:00-16:20

Electroweak Dumbbells and their dynamics**Speaker**

Teerthal Patel

16:20-16:40

Resurgence and self-completion in renormalized gauge theories**Speaker**

Juan Carlos Vasquez

16:40-17:00

Probing String-Modified Gravity in Neutron Stars**Speaker**

Tatsuya Daniel

17:00

Wednesday 28 June

14:20

Parallel: Dark Matter V

Session | **Location:** ISEB, 1010 | **Convener:** Sebastian Trojanowski

14:20–14:40 **Baryogenesis and Dark Matter In Multiple Hidden Sectors**

Speaker

Daniel Stolarski

14:40–15:00 **First WIMP search results from LZ and outlook**

Speaker

Hao Chen

15:00–15:20 **Recent Results of Dark Sector Searches with the BaBar Experiment**

Speaker

Brian Shuve

15:20

14:20

Parallel: Particle V

Session | **Location:** ISEB, 1200 | **Convener:** Lisa Everett

14:20–14:40

Constraints on Long-Range Dark Matter-Standard Model Interactions From Dynamical Friction in Ultrafaint Dwarf Galaxies

Speaker

Zach Bogorad

14:40–15:00

Constraints on the muon spin force from co-magnetometer experiments

Speaker

Yohei Ema

15:00–15:20 **Cosmologically Varying Kinetic Mixing**

Speaker

Xucheng Gan

15:20

14:20

Parallel: Strings/formal II

Session | **Location:** ISEB, 1310 | **Convener:** Daniel Harlow

14:20–14:40

Solution to Axion Quality Problem by Non-Minimal Gravitational Coupling

Speaker

Yoshiki Kanazawa

14:40–15:00 **Excited Q-balls**

Speaker

Yahya Almumin

15:00–15:20 **Off Shell Gluon Amplitudes in the CHY Formalism**

15:20

Speaker
Alex Stewart

15:40

Parallel: Cosmology IV

Session | **Location:** ISEB, 1310 | **Convener:** Graciela Beatriz Gelmini

15:40-16:00

Visible in the lab and invisible in cosmology: decaying sterile neutrinos

Speaker
Helena Garcia Escudero

16:00-16:20

Inflation with massive spin-2 ghosts

Speaker
Jeffrey Kuntz

16:20-16:40

Axion Poltergeist

Speaker
Dr Keisuke Inomata

16:40-17:00

Recurrent Axinovae and their Cosmological Constraints

Speaker
Huangyu Xiao

17:00

15:40

Parallel: Dark Matter VI

Session | **Location:** ISEB, 1010 | **Convener:** Dr Ofri Telem

15:40-16:00

The DarkSide experimental program: Dark Matter detection with liquid argon targets

Speaker
Claudio Savarese

16:00-16:20

Probing Axionic Instabilities in the late Universe via CMB-B mode

Speaker
Dr Subhjit Ghosh

16:20-16:40

A Parametric Model for Self-Interacting Dark Matter Halos

Speaker
Daneng Yang

16:40-17:00

MAGPI: Measurement of Axion Gradients with Photon Interferometry

Speaker
Michael A. Fedderke

17:00

15:40

Parallel: Particle VI

Session | **Location:** ISEB, 1200 | **Convener:** Yael Shadmi

15:40-16:00

Cosmic Stasis from Primordial-Black-Hole Evaporation and Its Phenomenological Implications

Speaker
Brooks Thomas

16:00-16:20

Probing Axions via Light Circular Polarization and Event Horizon Telescope

Speaker

Dr Fazlollah Hajkarim

16:20-16:40

The role of dimension-8 operators in an EFT for the 2HDM

Speaker

Matthew Sullivan

16:40-17:00

Conserved Currents and the Power of Enhancement: Unveiling New Bounds

Speaker

Tyler Smith

17:00

Thursday 29 June

14:20

Parallel: Dark Matter VII

Session | Location: ISEB, 1010 | Convener: Xiao-Gang He

14:20-14:40 **Probing the Local Dark Matter Halo with Neutrino Oscillations**

Speaker

Dr Andrey Shkerin

14:40-15:00

Dark matter production out of kinetic equilibrium: the latest developments

Speaker

Andrzej Hryczuk

15:00

14:20

Parallel: Particle VII

Session | Location: ISEB, 1200 | Convener: Ferruccio Feruglio

14:20-14:40 **Search for new physics in kaon decays at NA62**

Speaker

Prof. Evgueni Goudzovski

14:40-15:00

Non-perturbative effects in indirect detection of dark matter with (pseudo)-scalar interactions

Speaker

Julian Bollig

15:00

14:20

Parallel: Strings/formal III

Session | Location: ISEB, 1310 | Convener: Christopher Verhaaren

14:20-14:40

Title: Gravitational waves from strongly-coupled theories: a 2PI approach

Speaker

Eleanor Hall

14:40-15:00

Modular Average and Weyl Anomaly in Two-Dimensional Schwarzian Theory

Speaker

Chen-Te Ma

15:00

15:20

Parallel: Dark Matter VIII

Session | Location: ISEB, 1010 | Convener: Delilah Gates

15:20-15:40 **Evaporation Barrier for Dark Matter in Celestial Bodies**

Speaker

Dr Javier Acevedo

15:40-16:00

A New Window into Gravitationally Produced Scalar Dark Matter

16:00	<p>Speaker Sarunas Verner</p>
15:20	<p>Parallel: Particle VIII Session Location: ISEB, 1200 Convener: Shufang Su</p>
	<p>15:20–15:40 Computing (Anti)-de Sitter Graviton Function through Generalized On-Shell Recursion Relation Speaker Dr Savan Kharel</p>
	<p>15:40–16:00 Extending the Discovery Potential for Inelastic-Dipole Dark Matter with FASER Speaker Max Fieg</p>
16:00	
15:20	<p>Parallel: Strings/formal IV Session Location: ISEB, 1310 Convener: Hans Peter Nilles</p>
	<p>15:20–15:40 Neutrino Mass and Mixing From Eclectic Flavor Symmetry Speaker Dr Xiang-Gan Liu</p>
	<p>15:40–16:00 Metaplectic Flavor symmetries from magnetized tori Speaker Victor Knapp Perez</p>
16:00	