

Session Program

14-18 Oct 2024

**PPC 2024: XVII International Conference on
Interconnections between Particle Physics
and Cosmology**

Parallel - Dark Matter

Tuesday 15 October

14:00

Parallel - Dark Matter: Session 1

Session | **Location:** IIT Hyderabad , Seminar Room 2, Convention Center | **Convener:** Bhawna Gomber

14:00-14:15

Complementary probe of two-component Dark Matter and Gravitational waves in a scalar Singlet-Triplet extended model with a Dirac Fermion

Speaker

Mr Pankaj Borah

14:15-14:30

The Dark Hyper-Charge Symmetry

Speaker

HEMANT KUMAR PRAJAPATI

14:30-14:45

Search for dark matter with the monophoton final state using full Run2 data at CMS

Speaker

Mr Shriniketan Acharya

14:45-15:00

From Bar Formation to Dark Matter Detection: Implications of Inner Halo Spin Distribution

Speaker

Sandeep Kumar Kataria

15:00-15:15

Exploring DSNB boosted sub-GeV dark matter: insights from XENONnT and LZ experiments

Speaker

Mr Anirban Majumdar

15:15-15:30

Thermal correction to dark matter annihilation processes through real photon emission and absorption

Speaker

Prabhat Butola

15:30-15:45

Hunting Primordial Black Hole Dark Matter in Lyman-alpha forest

Speaker

Abhijeet Singh

15:45-16:00

Search for dark matter decay and annihilation using observation by Tibet AS γ and LHAASO

Speaker

Mr Abhishek Dubey

16:00

Wednesday 16 October

14:00

Parallel - Dark Matter: Session 2

Session | **Location:** IIT Hyderabad, Seminar Room 2, Convention Center | **Convener:** Suchita Kulkarni

14:00-14:15

Vector Dark Matter with Higgs Portal in Type II Seesaw framework

Speaker

Nandini Das

14:15-14:30

Neutrino floor in the light dark matter sector with isospin violating interactions

Speaker

Shankar Pramanik

14:30-14:45

Breaking into the window of primordial black hole dark matter with x-ray microlensing

Speaker

Mr Manish Tamta

14:45-15:00

Neutrinos from the Sun can discover dark matter-electron scattering

Speaker

Akash Kumar Saha

15:00-15:15

Dark matter phenomenology in presence of vector like quarks

Speaker

Shyamashish Dey

15:15-15:30

Faint light of old neutron stars and detectability at the James Webb Space Telescope and exploring the analytics of multiple scattering of dark matter.

Speaker

Brijesh Kanodia

15:30-15:45

Emergence of dark symmetry as well as neutrino mass scales from A_4 flavor symmetry

Speaker

Ranjeet Kumar

15:45-16:00

Viability of Boosted Light Dark Matter in a Two-Component Scenario

Speaker

Arindam Basu

16:00

17:30

Parallel - Dark Matter: Session 3

Session | **Location:** IIT Hyderabad, Seminar Room 2, Convention Center | **Convener:** Ranjan Laha

17:30-17:45

Comprehensive Phenomenology of the Dirac Scotogenic Model

Speaker

Sushant Yadav 2020504

17:45-18:00

Neutrino masses and mixing from milli-charged dark matter

Speaker

Vishnu Padmanabhan Kovilakam

18:00-18:15

WIMPy Leptogenesis in Non-Standard Cosmologies

Speaker

Dr. Devabrat Mahanta

18:15-18:30

Dark-Matter Mass from Angular Dependence

Speaker

Prof. Jong-Chul Park

18:30-18:45

A New Window into Multi-component Dark Matter

Speaker

Amit Dutta Banik

18:45-19:00

The dynamics and detection possibility of a pseudo FIMP in presence of a thermal Dark Matter

Speaker

Mr Dipankar Pradhan

19:00