

Timetable - WDMAP@IoP

Date: 07.08.2024

8.00-9.00	Registration (Venue: Block A Foyer)	
9.00-9.30	Inauguration	
Time	Speakers	Title of the talk
9.30-10.15	Subhaditya Bhattacharya	Particle dark matter: a short overview
10.15-11.00	Ranjan Laha	Dark matter detection via indirect and direct detection
11.00-11.30	Tea	
11.30-12.00	Subhendra Mohanty	Experimental signatures of Ultra-light dark matter
12.00-12.30	Soumitra Nandi	Possible constraints on a simplified DM model with a spin-0 mediator
12.30-13.00	Arindam Chatterjee	Search for Supersymmetric Dark Matter in the Light of Experimental Data
13.00-14.30	Lunch	
14.30-15.15	Pratik Majumdar	Indirect Searches for Dark Matter : Experimental Overview
15.15-16.00	<i>Genevieve Belanger</i>	<i>micrOMEGAs : from WIMPs to FIMPs</i>
16.00-16.30	Tea	
16.30-17.00	<i>Nangqiang Song</i>	<i>Dark Matter and New Physics at High Energy Neutrino Telescopes</i>
17.00-17.30	Nirmal Raj	The neutrino roof of dark matter detection
17.30-18.00	Biplob Bhattacharjee	Search for light mediators
Poster Session		
18.00 onwards	Student Poster Session	Poster session by students
19.30 onwards	Director's dinner	

Date: 08.08.2024

9.00-9.45	Debasish Borah	The Landscape of Particle Dark Matter Models
9.45-10.30	Partha Konar	Probing the dark matter in an era of AI/ML
10.30-11.00	<i>Silvia Manconi</i>	<i>Seeking dark matter signals in gamma rays and antiprotons using machine learning</i>
11.00-11.30	Tea	
11.30-12.00	Subhendu Rakshit	Astrophysical neutrinos at IceCube
12.00-12.30	Tirtha Sankar Roy	Dark matter constraints from celestial capture at galactic stars
12.30-13.00	Narendra Sahu	Thermal leptogenesis, dark matter and gravitational waves from an extended canonical seesaw
13.00-14.30	Lunch	
14.30-15.15	Rishi Khatri	Signatures of dark sector physics in the CMB and BBN
15.15-16.00	Arka Banerjee	Structure formation as a probe of Dark Matter Physics
16.00-16.25	Tea	
16.25 - 16.55	Bhawna Gomber	Dark matter searches using CMS experiment
16.55-17.30	Sanjib Kumar Agarwalla	Neutrino Astrophysics to Particle Physics with IceCube
17.30 onwards	Student's/Postdoc's talk (Venue: Block B Lecture Hall)	
	Dr. Purusottam Ghosh	New Physics with Neff in the CMB
	Dr. Kuldeep Deka	Thermal DM with low temperature reheating
	Dr. Sudipta Show	Thermal dark matter during reheating
	Dr. Disha Bhatia	TBA

Date: 08.08.2024

Anirban Majumdar

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

Sudipta Das

Constraining long-range interaction using the flavor composition estimates of astrophysical neutrino experiments

Antara Dey

Constraints on Dark Matter-Neutrino Interaction from 21-cm Cosmology

Indra Kumar Banerjee

TBA

Date: 09.08.2024

9.00-9.40

Arunansu Sil

Some recent developments in Leptogenesis

9.40-10.15

Ujjal Kumar Dey

Phase transitions as origin of primordial black holes and their signatures in gravitational waves

10.15-11.00

Tracy R. Slatyer

21cm as a probe of decaying dark matter

11.00-11.30

Tea

11.30-12.00

Tanmoy Modak

Probing inflation with CMB and SKA

12.00-12.30

Basabendu Barman

New Physics in the Early Universe

12.30-13.00

Sourov Roy

Signatures of solar chameleons in the Earth's magnetic field

13.00-14.20

Lunch

14.20-15.00

Miguel Escudaro

Neutrino Decoupling: Methods and BSM Constraints

Working Group Sessions

Working Group A
(Venue: Block A Lecture Hall)

15.00-15.20

Sudhanwa Patra

Connecting low scale CP-violation to High scale Leptogenesis

Date: 09.08.2024

15.20-15.40	Dibyendu Nanda	Imprints of non-thermal leptogenesis in Cosmic Microwave Background
15.40-16.00	Poonam Mehta+Prantik Sarmah	Discussion on UHECR and DM
16.00-16.30	Tea	
16.30-16.50	Bibhabasu Dey	DM-Electron Scattering — A Probe to Sub-GeV Dark Matter
16.50-17.10	Sanjoy Mandal	Possible ways to improve fermionic dark matter properties in the Scotogenic models
17.10-17.30	Discussion session	
Working Group B (Venue: Block B Lecture Hall)		
15.00-15.20	Sanjoy Biswas	Dark photon searches at the LHC and future collider experiments
15.20-15.40	Rahul Srivastava	Dark Hypercharge Symmetry
15.40-16.00	Jayita Lahiri	Discussion on co-scattering DM
16.00-16.30	Tea	
16.30-16.50	Sarif Khan	Constraining dark matter from strong phase transitions in a $U(1)_{L\mu-L\tau}$ model: Implications for neutrino masses and muon $g - 2$
16.50-17.30	Discussion session	
17.30 pm onwards	Concluding Remarks and Vote of Thanks	

****Talk title marked in italics will be in online mode**

- *Except the sessions of working group B on 9th of August and student's/postdoc's talks on 8th of August, for all other talks, venue will be Block A lecture hall (Trilochan Pradhan Lecture Hall).*
- *Talks of the following sessions (working group B and student's/postdocs's talks) will be held in Block B lecture hall.*