

# YOUNG PHYSICISTS MEET (YPM) - 2018

April 24-26, 2018, PRL, Ahmedabad

Day 1(Tuesday, 24<sup>th</sup> April 2018)

**9:00 AM - 9:30 AM: Registration**

**9:30 AM - 10:00 AM: Breakfast Break**

## Session 1

10:00 AM - 10:30 AM	Hot Nuclear matter in Strong Magnetic field	Manu Kurian (IITGn)
10:30 AM -11:00 AM	Effect of the Magnetic field on Dilepton Production	Balbeer Singh (PRL)

**11:00 AM - 11:30 AM : Tea Break**

## Session 2

11:30 AM - 12:00 PM	Black hole entropy production And transport coefficients	Fairoos C. (IITGn)
12:00 PM - 12:30 PM	Effective description of plasmons in the hot QCD/QGP medium	Mohd. Yousuf Jamal (IITGn)

**12:30 PM- 1:30 PM: Lunch Break**

## Session 3

2:00 PM - 2:30 PM	TBA	Aman Abhishek (PRL)
2:30 PM - 3:00 PM	High-Fidelity interpolation of Compact binary Coalescence (CBC) waveform using radial basis functions	Ayatri Singha (IITGn)

**3:00 PM – 3:30 PM: Tea Break**

## Session 4

3:30 PM - 4:00 PM	Developing an early-warning search for gravitational wave transients using Random Matrix Factorization	Amit Reza (IITGn)
4:00 PM - 4:30 PM	Designing an effectual template placement algorithm for gravitational wave searches	Soumen Roy (IITGn)

## Day 2(Wednesday, 25<sup>th</sup> April 2018)

**9:30 AM - 10:00 AM : Breakfast Break**

### Session 1

10:00 AM - 10:30 AM	Bounds on Neutrino Mass in Viscous Cosmology	Priyank Parashari (PRL)
10:30 AM -11:00 AM	Warm Inflation	Richa Arya (PRL)

**11:00 AM - 11:30 AM : Tea Break**

### Session 2

11:30 AM - 12:00 PM	Black Hole Topology in $f(R)$ Metric	Akash K Mishra (IITGn)
12:00 PM - 12:30 PM	An observational imprint of nonlinear matter-gravity coupling in the speed of gravitational waves	Soumya Jana (PRL)

**12:30 PM- 1:30 PM: Lunch Break**

### Session 3

2:00 PM - 2:30 PM	EFT of large scale structure	Prakrut Chaubal (PRL)
2:30 PM – 3:00 PM	Viscous Dark Energy Model	Arvind Kumar Mishra

**3:00 PM – 3:30 PM: Tea Break**

### Session 4

3:30 PM - 4:00 PM	Jet Substructure at the LHC	Akanksha Bhardwaj (PRL)
4:00 PM - 4:30 PM	Charged Higgs Discovery Prospect	Agvino Sarkar (IITGn)
4:30 PM - 5:00 PM	Quantum phases of dipolar bosons in optical lattices	Soumik Bandyopadhyay

## Day 3(Thursday, 26<sup>th</sup> April 2018)

**9:30 AM - 10:00 AM : Breakfast**

### Session 1

10:00 AM - 10:30 AM	The 21-cm fluctuations from dark matter interactions	Ashish Narang (PRL)
10:30 AM -11:00 AM	Halo mass function and Dark Matter properties	Arindham Mazumdar (PRL)

**11:00 AM - 11:30 AM : Tea Break**

### Session 2

11:30 PM - 12:00 PM	Dark Matter and Neutrino Mass in IDM+VLL Models	Soumya Sadhukhan (PRL)
12:00 PM - 12:30 PM	Partial mu tau symmetry and its validation at DUNE & Hyper-K	Kaustav Chakraborty (PRL)

**12:30 PM- 1:30 PM: Lunch**

### Session 3

2:00 PM - 2:30 PM	Neutrino Physics and Flavor Symmetries	Biswajit Karmakar (PRL)
2:30 PM - 3:00 PM	Phenomenology of B decays	Bharti Kindra (PRL)

**3:00 PM – 3:30 PM: Tea**

### Session 4

3:30 PM - 4:00 PM	General U(1)' Extensions of the Standard Model, Neutrino Mass and Fermionic Dark Matter	Vishnudath K.N. (PRL)
4:00 PM -4:30 PM	Phenomenological aspect of very special relativity	Alekha (PRL)
4:30 PM -5:00 PM	Better than chi square	Bhavesh Chauhan (PRL)

**Closing Remarks**