

चतुर्थ पीआरएल सीसीएमपी

4th PRL CCMP

Duration: 6-8 February 2023

Venue: K. R. Ramanathan Auditorium, PRL main campus

Day 1: 6th February

8:45 - 9:30 AM	Registration (KRR Auditorium Foyer)
9:30 - 10:00 AM	Inauguration
Session 1 (Chair: Yuval Gefen*)	
10:00 - 10:45 AM	Sumathi Rao (ICTS Bengaluru) <i>Non-abelian anyons: From Majoranas to parafermions</i>
10:45 AM - 11:15 AM: Conference Photo + Tea break (Admin Lawn)	
Session 1 cont.	
11:15 - 11:45 AM	Shikha Varma (IOP Bhubaneswar) <i>Quantum dots and Stone Wale Topological Defects in Graphene</i>
Session 2 (Chair: Angom Dilip Kumar Singh)	
11:45 AM- 1:15 PM	Flash talks by the poster presenters
1:15 - 2:15 PM - Lunch break (Nursery Lawn)	
Session 3 (Chair: Sumathi Rao)	
2:15 - 3:00 PM	Priya Mahadevan (SNBNCBS, Kolkata) <i>Why are twisted bilayers different from their untwisted counterparts?</i>
3:00 - 3:30 PM	C. S. Yadav (IIT Mandi) <i>Electronic transport and Planar Hall effect in Dirac semimetal PdTe₂</i>
3:30 - 4:00 PM	Amit Agarwal (IIT Kanpur) <i>Tunable interband and non-reciprocal plasmons in moire systems</i>
4:00 - 4:30 PM - Tea (Library Lawn)	
4:00 - 5:30 PM	Poster Session 1
6:00 - 7:00 PM	S. Ramachandran (PRL Ahmedabad) <i>Air Pollution and Climate Change: Challenges</i>
7:30 PM onwards: Director's Dinner (Nursery Lawn)	

Day 2: 7th February

Session 4 (Chair: Arindam Ghosh)	
9:00 - 9:45 AM	Yuval Gefen* (Weizmann Institute of Science, Israel) <i>Measuring Entanglement in Electronic Interferometers**</i>
9:45 - 10:15 AM	Gautam Dev Mukherjee (IISER Kolkata) <i>Effect of strain on transition metal dichalcogenides: Experimental investigations at high pressures</i>
10:15 - 10:45 AM	Shantanu Mukherjee (IIT Madras) <i>Topological and ordered phases in Di-Chalcogenide materials NbSe₂ and monolayer 1T'-Wte₂</i>
10:45 - 12:00 AM - Tea & Poster Session (Library Lawn)	
10:45- 12:00 PM	Poster Session 2
Session 5 (Chair: Priya Mahadevan)	
12:00 NOON- 12:30 PM	Pankaj Bhalla (SRM University, AP) <i>Nonlinear Transport/optical effects via quantum geometric quantities</i>
12:30 - 1:00 PM	Samik DuttaGupta (SINP, Kolkata) <i>Electrical switching of metallic antiferromagnet/non-magnet heterostructure</i>
1:00 - 2:00 PM - Lunch break (Nursery Lawn)	
Session 6 (Chair: Pratap Raychaudhuri)	
2:00 - 2:45 PM	Arindam Ghosh (IISc Bangalore) <i>Probing new phases in twisted bilayer graphene with thermoelectricity</i>
2:45 - 3:15 PM	Arijit Saha (IOP, Bhubaneswar) <i>Higher-Order Topological Superconductors: Statics and Dynamics</i>
3:15 - 3:30 PM - Tea (Admin Lawn)	
3:30-7:00 PM Tour to Gandhi Ashram at Sabarmati	
7:30 PM onwards: Conference Dinner (Nursery Lawn)	

Day 3: 8th February

Session 7 (Chair: Gautam Dev Mukherjee)	
9:00 - 9:45 AM	Pratap Raychaudhuri (TIFR, Mumbai) <i>TBA</i>
9:45 - 10:15 AM	Sumilan Banerjee (IISc Bangalore) <i>Quantum oscillations in the magnetization and density of states of insulators</i>
10:15 - 10:45 AM	Ajit C. Balram (IMSc, Chennai) <i>Very high energy collective modes of partons in fractional quantum Hall fluids</i>
10:45 - 11:00 AM	Rajeswari Roy Chowdhury (IISER Bhopal) <i>Unconventional emergent Hall effect phenomena and its modification in a vander Waals ferromagnet Fe_3GeTe_2</i>
11:00 - 11:30 AM - Tea break (Admin Lawn)	
Session 8 (Chair: Arijit Saha)	
11:30 - 12:00 NOON	Subhro Bhattacharjee (ICTS, Bengaluru) <i>Non-Kramers Quantum Spin-Ice</i>
12:00 NOON - 12:30 PM	Jayendra Nath Bandyopadhyay (BITS Pilani, Pilani) <i>Floquet engineering of solid-state systems: An algebraic approach</i>
12:30 - 1:00 PM	Santanu K. Maiti (ISI Kolkata) <i>Spintronics in antiferromagnetic helix</i>
1:00 - 2:00 PM - Lunch break (Nursery Lawn)	
Session 9 (Chair: Shikha Varma)	
2:00 - 2:30 PM	Angom Dilip Kumar Singh (Manipur University) <i>Quantum phases of dipolar bosons in a multilayer optical lattice</i>
2:30 - 3:00 PM	Swastika Chatterjee (IISER Kolkata) <i>Oceans of water deep in the Earth's mantle</i>
3:00 - 3:20 PM	Ayan Khan (Bennett University, Noida) <i>Quantum Materials beyond the realms of Gross-Pitaevskii Equation</i>
3:20- 3:35 PM	Deepak Gaur (PRL Ahmedabad) <i>Quench dynamics of ultracold gasses</i>
3:35 -3:50 PM	Bharathiganesh D. (PRL Ahmedabad) <i>SSH model with a non-orientable bulk: union of topology and flat bands</i>
3:50 - 4:15 PM	Valedictory Session
4:15 PM	Tea (Admin Lawn)

*visitor during 6 -7 February 2023 **Theoretical Physics colloquium