

Frontier Symposium in Physics (FSPHY 2024) Programme

Day 1: Friday, 19-01-2024

Time	Session Description
12:30-13:50	Lunch
14:00-15:00	Registration and Welcome Tea
Session 1 Chair: Ramesh Chandra Nath	
15:15-15:30	Inauguration: Director, IISER TVM Prof. J. N. Moorthy
15:30-16:00	V. Parameswaran Nair Fluid dynamics: New light on problems old and new
16:00-16:30	Archan S. Majumdar Quantum Information and Foundations: from basic principles to applications
16:30-17:00	Yogesh Singh Quantum Spin Liquid in a Kagome bi-layer material
17:00-17:30	Tea Break and Poster Session 1
Session 2 Chair: Krishnendu Gope	
17:30-18:00	Vaibhav Prabhudesai Quantum coherence and electron collisions
18:00-18:30	Vijay Shenoy Theory of Phases
18:30-19:00	Kuntala Bhattacharjee Local electronic states of Sn doped WS ₂ surface
19:30-21:00	Conference Dinner

Day 2: Saturday, 20-01-2024

Time	Session Description
8:00-9:20	Breakfast
Session 3 Chair: Nitin Yadav	
9:30-10:00	Durgesh Tripathi India's first solar observatory in space: The Aditya L1
10:00-10:30	Sreedhar Dutta Oscillating states in periodically driven Langevin systems
10:30-11:00	Tea Break and Poster Session 2
Session 4 Chair: Rajeev N. Kini	
11:00-11:30	Naveen Surendran Dynamical freezing and Floquet transitions in periodically driven Su-Schrieffer-Heeger model
11:30-12:00	Sreerup Raychaudhuri Future direction in particle physics
12:00-13:00	Women in Science
13:00-14:00	Lunch
Session 5 Chair: Tanumoy Mandal	

14:15-14:45	Joy Mitra Engineering Strain Inhomogeneities in MoS ₂ Monolayers
14:45-15:15	Shabnam Iyyani Onset of Particle Acceleration during the Prompt Phase in Gamma-Ray Bursts
15:15-16:00	Tea Break and Poster Session 3
Session 6 Chair: D. V. Senthilkumar	
16:00-16:30	Renu John Deep Learning Approaches in Quantitative Phase Microscopy and Its Clinical Applications
16:30-17:00	Neelima Gupte Climate network analysis of extreme events: Tropical Cyclones
17:00-17:30	Ajit Srivastava Detecting gravitational waves with pulsars as resonant Weber detectors
17:30-18:00	High Tea/Coffee
18:00-19:00	Flash Presentations
19:30-21:00	Conference Dinner

Day 3: Sunday, 21-01-2024	
Time	Session Description
8:00-9:20	Breakfast
Session 7 Chair: Amal Medhi	
9:30-10:00	Nirmal Viswanathan Common optical components, uncommon optical phenomena
10:00-10:30	Aveek Bid Playing with Graphene bands
10:30-11:00	Shikha Verma Nanoscale patterning of surfaces: For sensor, device and Bio-applications
11:00-11:30	Tea Break
Session 8 Chair: Anil Shaji	
11:30-12:00	Tuhin Maity Strain-engineering of nanoscale multiferroics for novel spintronics applications
12:00-12:30	Arghya Tarafdar Electron-phonon coupling, critical temperature and gap functions in NbSe ₂ /MoS ₂ Ising Superconductors
12:50-13:00	Closing Remarks
13:00-14:00	Lunch