

9:00–10:00 hrs : Inaugural function followed by High Tea

Chair	E. V. Sampathkumaran	Session 1 (L2-103)
Time	Speaker	
10:00–10:45	D. D. Sarma (IISc) “In search of Quantum Spin Liquids”	
10:45–11:30	G. Baskaran (IMSc) “Emergent Glassy Quantum Matter in Disorder free Quantum Spin Liquids”	

Tea Break (11:30-11:45)

Chair	Hem C. Kandpal	Session 2- Parallel-I (L2-103)
Time	Speaker	
11:45–12:15	Arindam Ghosh (IISc) “Thermoelectricity to probe for new phases in twisted bilayer” graphene	
12:15–12:45	Saikat Ghosh (IIT Kanpur) “Tunable Classical Discrete Time Crystals”	
12:45–13:00	Jyoti Krishna (CSIC-UPV/EHU, San-Sebastian, Spain) “Non-linear optical response of TMD Nanotubes using Wannier interpolation”	

Chair	Tamalika Banerjee	Session 2- Parallel-II (L2-104)
Time	Speaker	
11:45–12:15	Subhankar Bedanta (NISER) “Study of Domain wall dynamics and interfacial Dzyaloshinskii-Moriya interaction in HM/FM multilayer thin film”	
12:15–12:45	Suvankar Chakraverty (INST Mohali) “KTaO ₃ —The New Kid on the Spintronics Block”	
12:45–13:00	Vivek Kumar (IISER Bhopal) “Rashba-like spin-orbit interaction and spin texture at KTaO ₃ from DFT calculations”	

Lunch Break (13:00-14:30)

Chair	Arindam Ghosh	Session 3- Parallel-I (L2-103)
Time	Speaker	
14:30–15:00	Manuel Bibes (CNRS, Paris) “Ferroelectric and multiferroic two-dimensional electron gases”	
15:00–15:30	Tamalika Banerjee (Groningen) “Electronic transport as a probe of magnetic ordering in complex”	
15:30–15:45	Sayantika Bhowal (ETH Zurich) “Hidden real-space and reciprocal-space magnetoelectric multipoles and their detection using Compton scattering”	
15:45-16:00	Abhishek Nag (Paul Scherrer Institut) “Quadrupolar magnetic excitations in an isotropic spin-1 antiferromagnet”	

Chair	Davinder Kaur	Session 3- Parallel-II (L2-104)
Time	Speaker	
14:30–15:00	Pratap Raychaudhuri (TIFR Mumbai) “Spectroscopic evidence of Bose Metal in Ultrathin MoGe thin film”	
15:00–15:30	Peayush K. Choubey (IIT Roorkee) “Pair Density Wave Order in Underdoped Cuprates”	
15:30–15:45	Tuhin K. Maji (IISc) “Electrical Resistance in All-metallic Cluster of Ultra-small Silver Nanoparticles Embedded in Gold”	
15:45-16:00	Gourav Vaid (IISER TVM) “Unity of universal parameter (alpha) in an overdoped single crystal of high temperature superconductor Bi ₂ Sr ₂ CaCu ₂ O _{8+x} ”	

Tea & Poster Session
(16:00-18:00)

Chair	Arghya Taraphder	Special Evening Session (L2-103)
Time	Speaker	
18:00–19:00	Elbio Dagotto (ORNL/University of Tennessee) “Surprises at intermediate coupling in electronic correlated systems: spirals, Majoranas, and pairing”	
19:00–20:00	Anthony J. Leggett (University of Illinois,Urbana-Champaign) “What can we do with a quantum liquid?”	

Conference Dinner (20:00 onwards)

Day 2: October 13, 2022

Chair	Pratap Raychaudhuri	Session 1 (L2-103)
Time	Speaker	
9:00–09:45	R. Ramesh (Rice University, USA) <i>“Ultra-Low-Voltage, Beyond CMOS Microelectronics”</i>	
09:45–10:30	E. V. Sampathkumaran (TIFR Mumbai) <i>“Magnetic-field induced melting of long-range magnetic order in Tb₅Si₃ and its implications”</i>	
10:30–11:15	S. M. Yusuf (BARC) <i>“Search for Quantum Magnetism in Low–Dimensional Spin Systems”</i>	

Tea Break (11:15-11:45)

Chair	Ajay	Session 2 - I (Parallel) (L2-103)
Time	Speaker	
11:45–12:15	Brijesh Kumar (JNU) <i>“Theory of Quantum Oscillations in Kondo Insulating Bulk”</i>	
12:15–12:45	Saurabh Basu (IIT Guwahati) <i>“Higher Order Topology in a Ladder”</i>	
12:45–13:15	Sumiran Pujari (IIT Bombay) <i>“Punctured-Chern topological invariants for semi-metallic bandstructures”</i>	

Chair	Kaushik Sen	Session 2 - II (Parallel) (L2-104)
Time	Speaker	
11:45–12:15	Surendra Singh (BARC) <i>“Interface Magnetization in Oxide Heterostructures”</i>	
12:15–12:45	Debakanta Samal (IOP Bhubaneswar) <i>“Topological Electron Transport Due To Quenched Magnetic Impurity Scattering By Antiferromagnetic Proximity in SrCuO₂/SrIrO₃”</i>	
12:45–13:15	Saikat Das (IIT Kharagpur) <i>“Observation of giant room temperature spin-orbit torque in permalloy-ferroelectric Bi₂WO₆ heterostructures”</i>	

Lunch Break (13:15-14:30)

Dinner (19:30-22:00)

Venue: APJ Abdul Kalam Block

Chair	Himanshu Fulara	Session 3- Parallel-I (L2-103)
Time	Speaker	
14:30–15:00	P. K. Muduli (IIT Delhi) <i>“Large spin Hall conductivity in a quantum material”</i>	
15:00–15:30	Kaushik Parida (IIT Roorkee) <i>“Mechanical soft and high piezoelectric behaviour in organic-inorganic hybrid ferroelectrics via molecular bond weakening”</i>	
15:30–15:45	Anamika Kumari (INST Mohali) <i>“A scheme to determine the carrier density distribution, potential profile, and subband quantization of a conducting interface LaVO₃/SrTiO₃”</i>	
15:45-16:00	Showkat Hassan (HRI) <i>“Pressure-induced bandgap narrowing in Cs₂AgPdCl₅ lead-free halide”</i>	

Chair	Narayan Mohanta	Session 3- Parallel-II (L2-104)
Time	Speaker	
14:30–15:00	C. S. Yadav (IIT Mandi) <i>“Shubnikov de-Haas Oscillations and ARPES Study in Transition Metal Doped Topological Insulators”</i>	
15:00–15:30	Kaushik Sen (IIT Delhi) <i>“Quasiparticle dynamics in a ferromagnetic nodal-line semimetal”</i>	
15:30–16:00	Kaustubh Priolkar (Goa University) <i>“Understanding Glassy State in Martensites”</i>	

Tea & Poster Session
(16:00-18:00)

Day 3: October 14, 2022

Venue: APJ Abdul Kalam Block

Chair	G. D. Varma	Session 1 (L2-103)
Time	Speaker	
9:00–09:45	T. V. Ramakrishnan (IISc) <i>“Linear Resistivity in Metals”</i>	
09:45–10:30	Arghya Taraphder (IIT Kharagpur) <i>“The enigmatic transition metal dichalcogenides”</i>	
10:30–11:15	Kalobraban Maiti (TIFR Mumbai) <i>“Electron spectroscopy for the physics of quantum materials”</i>	

Tea Break (11:15-11:30)

Chair	Tapas K. Mandal	Session 2 - I (Parallel) (L2-103)
Time	Speaker	
11:30–12:00	Anil Jain (BARC) <i>“Spin Correlations in Low Dimensional Quantum Magnets”</i>	
12:00–12:30	Suhas Gangadharaiah (IISER Bhopal) <i>“Driven quantum spin chain in the presence of noise”</i>	
12:30–13:00	Deepshikha Jaiswal-Nagar (IISER TVM) <i>“Experimental realization of multipartite entanglement in a uniform antiferromagnetic quantum spin chain ”</i>	
13:00-13:15	Abhisek Mishra (NISER) <i>“Spin pumping and inverse spin Hall effect in sputtered MoS2/CoFeB bilayers”</i>	
13:15-13:30	Kiran Singh (NIT Jalandhar) <i>“Structural correlations in magnetoelectric property of Co4Nb2O9”</i>	

Lunch Break (13:30-15:00)

Chair	Peayush K. Choubey	Session 2 - II (Parallel) (L2-104)
Time	Speaker	
11:30–12:00	Siddhartha Lal (IISER Kolkata) <i>“Revisiting the impurity Metal-Insulator transition at the heart of DMFT: what lies behind the veil of self-consistency?”</i>	
12:00-12:30	N. S. Vidhyadhiraja (JNCASR) <i>“Steady-state dc transport through an Anderson impurity coupled to leads with spin-orbit coupling”</i>	
12:30-12:45	Vinod Asokan (NIT Jalandhar) <i>“Correlation effects in quasi-one-dimensional electron quantum wire”</i>	
12:45-13:00	Ravi Kiran (IIT Kharagpur) <i>“Investigation of electronic and optical properties in ReS2”</i>	
13:00–13:15	K. R. Abidi (University of Jyväskylä) <i>“Electronic structure and elasticity of two-dimensional metals of group 10: A DFT study”</i>	

Tea & Poster Session
(15:00-17:00)

	Session 3 (L2-103)
Time	
17:00–17:30	Valedictory Function

Dinner (19:30-21:30)