

List of Participants Presenting Talks

SL. No	Registration ID	Name	Institute	Abstract ID	Paper Title
1	QMAT2024_0001	Mr Nikhil Malviya	Indian Institute of Science	qmat2024_140	Experimental Extraction of Phonon Scattering Lifetimes in vdW Materials Using Transient Grating
2	QMAT2024_0006	Dr Nayana Devaraj	Indian Institute of Science (IISc)	qmat2024_004	Interplay of altermagnetism and pressure in hexagonal and orthorhombic MnTe
3	QMAT2024_0007	Dr Supriya Ghosal	JNCASR	qmat2024_014	Bi based half-Heusler alloys: Potential candidates for thermoelectric applications
4	QMAT2024_0018	Mr Saisab Bhowmik	Indian Institute of Science, Bangalore	qmat2024_125	Magnetism, Fermi surface reconstructions, and Chern insulators in twisted bilayer graphene
5	QMAT2024_0019	Mr SHUBHAM PATEL	IIT Kharagpur	qmat2024_006	Electron-phonon coupling, critical temperatures and gaps in NbSe ₂ /MoS ₂ Ising Superconductors
6	QMAT2024_0023	Dr MANTU MODAK	SAHA INSTITUTE OF NUCLEAR PHYSICS	qmat2024_101	Unusual magnetic properties of TbRu ₂ Ge ₂ compound
7	QMAT2024_0047	Mr Mainak Pal	Indian Association for the Cultivation of Science	qmat2024_157	Scar-induced imbalance and anomalous mid-spectrum zero modes in Rydberg ladders with staggered detuning
8	QMAT2024_0053	Mr SANTANU DHARA	Indian Institute of Science Education and Research Bhopal (IISERB)	qmat2024_016	Transport phenomena and correlation dynamics of a one-dimensional effective Hamiltonian equivalent to the hexagonal Harper model
9	QMAT2024_0056	Mr Krishnendu Patra	SN BOSE NATIONAL CENTRE FOR BASIC SCIENCES	qmat2024_282	Exploring the spin resolved fermi surface in an altermagnet- case of CrSb
10	QMAT2024_0059	Mr Sk Kalimuddin	Indian Association for the Cultivation of Science	qmat2024_038	Free Sliding Charge Density Wave: A Dynamical Critical Phenomenon
11	QMAT2024_0061	Mr SAIKAT MONDAL	IIT KANPUR	qmat2024_029	Percolation transition in a topological phase
12	QMAT2024_0069	Mr Rajat Sharma	IIT Ropar	qmat2024_024	Temperature-induced supersolidity in spin-orbit-coupled Bose gases
13	QMAT2024_0078	Mr Souvik Banerjee	Jawaharlal Nehru Centre for Scientific Research (JNCASR)	qmat2024_058	Unconventional vortex states in the Chevrel phase superconductor PbMo ₆ Se ₈ ?
14	QMAT2024_0079	Dr Kuntal Bhattacharyya	IIT Guwahati	qmat2024_093	Topological phase transition through electron-phonon interaction in an $\tilde{A}Z\tilde{A}\pm$ -T3 quantum spin Hall insulator
15	QMAT2024_0082	Dr Debika Debnath	Physical Research Laboratory	qmat2024_028	Diode effect in quantum dot-based Josephson junction

List of Participants Presenting Talks

SL. No	Registration ID	Name	Institute	Abstract ID	Paper Title
16	QMAT2024_0084	Mr SUBHASIS SHIT	Indian Institute of Technology, Kharagpur	qmat2024_096	Reducing the vortex entanglement via Pb substitution in the charge reservoirs of Bi-2212 superconductor
17	QMAT2024_0085	Dr Jagannath Sutradhar	Bar-Ilan University, Ariel University, Israel	qmat2024_044	Singlet, triplet, and mixed all-to-all pairing states emerging from incoherent fermions
18	QMAT2024_0092	Mr Debamalya Dutta	National Institute of Science Education and Research	qmat2024_034	Frequency-selective amplification of nonlinear response in strongly correlated bosons
19	QMAT2024_0101	Mr Ajit Kumar Dash	Indian Institute of Science, Bangalore	qmat2024_091	Utilizing low energy electron beam irradiation for ultrasharp single photon emitter generation in monolayer transition metal dichalcogenides
20	QMAT2024_0116	Mr Ajay Partap Singh Rana	Institute of Nano Science and Technology (INST), Mohali	qmat2024_233	Spin caloritronics and magneto-thermoelectric effect in two-dimensional magnetic materials
21	QMAT2024_0118	Mr Bhabani Prasad Sahu	Indian Institute of Technology Bombay	qmat2024_057	Influence of strain and point defects on the electronic structure and related properties of (111)NiO epitaxial films
22	QMAT2024_0121	Ms Dipanwita Bhattacharjee	IIT Bombay	qmat2024_196	Influence of band convergence on the thermoelectric transport properties of CoBi-based half-Heusler alloys
23	QMAT2024_0125	Dr Subhamita Sengupta	Tata Institute of Fundamental Research, Mumbai	qmat2024_189	Inverse Melting in A Pinned Vortex Liquid
24	QMAT2024_0132	Mr Arun B	University of Hyderabad	qmat2024_070	2D broadband FMR data acquisition with Vector Network Analyzer and Determination of Asymptotic Lande g-Factor
25	QMAT2024_0143	Mr Anirban Das	Indian Association for the cultivation of science	qmat2024_141	Generation of Macroscopic Entanglement via Quantum Annealing
26	QMAT2024_0144	Mr SAGNIK CHAUDHURI	Indian Association for the Cultivation of Science	qmat2024_160	Stability of Emergent Conservation Laws in Periodically Driven Quantum Systems
27	QMAT2024_0145	Dr RAKTIMA BASU	Saha Institute of Nuclear Physics	qmat2024_081	Field Induced Metal to Insulator Transition in Strongly Correlated Nickelate Nanostructures
28	QMAT2024_0154	Mrs Sonali Gangwar	IIT Guwahati	qmat2024_207	Structure and dynamics of imbalanced quantum droplet in spin-orbit coupled Bose-Einstein condensates

List of Participants Presenting Talks

SL. No	Registration ID	Name	Institute	Abstract ID	Paper Title
29	QMAT2024_0169	Dr Pooja Saini	Institute of Physics, Bhubaneswar	qmat2024_106	Revival of the Hofstadter butterfly in the Presence of various disorders and Correlation Strength
30	QMAT2024_0170	Dr RAMITA SARKAR	INSTITUTE OF PHYSICS BHUBANESWAR	qmat2024_111	A maximum concurrence criteria to investigate absolutely maximally entangled states
31	QMAT2024_0177	Mr Manodip Routh	S N Bose National Centre for Basic Sciences	qmat2024_118	Emergent Quadrupolar Order in the Spin-1/2 Kitaev-Heisenberg Model
32	QMAT2024_0199	Ms Manvi Verma	Indian Institute of Science	qmat2024_173	Digital Twin Enabled Understanding and Modulation of Nucleation Density for Optimized 2D Material Synthesis
33	QMAT2024_0202	Mr Snehasish Sen	IIT Kharagpur	qmat2024_158	Theory of Polar Skyrmions in Layered Structure of Ferroelectric Perovskites
34	QMAT2024_0205	Ms Tista Banerjee	Indian Association for the Cultivation of Science	qmat2024_163	Entanglement transitions and role of emergent symmetry in non-Hermitian integrable Floquet systems
35	QMAT2024_0208	Dr Deepak Gaur	Manipur University	qmat2024_188	Non-Equilibrium Dynamics of Ultracold Bosonic Gases: Insights from Cluster Mean-Field Theory
36	QMAT2024_0214	Ms Simrandeep Kaur	Indian Institute of Science	qmat2024_171	Controlling the Particle-hole symmetry in fractional Quantum Hall state in ABA trilayer graphene.
37	QMAT2024_0228	Dr Monalisa Singh SinghRoy	Bar-Ilan University, Israel	qmat2024_197	Measurement induced phase transition in many-body systems (Extending the critical log-law phase in an integrability-broken transverse field Ising model)
38	QMAT2024_0230	Mr Naba Prakash Nayak	Indian institute of technology Bombay	qmat2024_201	Weak topological insulator phase in two-dimensional chiral symmetry class and universality of Anderson transition in chiral class.
39	QMAT2024_0235	Dr Satyaki Kundu	Weizmann Institute of Science	qmat2024_225	Dynamic hysteresis at a noisy saddle node shows power-law scaling but nonuniversal exponent
40	QMAT2024_0237	Mr SUBHAJYOTI PAL	NISER	qmat2024_206	Theoretical analysis of multi-spin Excitations in 2D Antiferromagnet probed by Resonant Inelastic X-ray Scattering (RIXS)
41	QMAT2024_0239	Dr Nilanjan Roy	Nanyang technological university, Singapore	qmat2024_254	Superlattice induced electron percolation within a single Landau level

List of Participants Presenting Talks

SL. No	Registration ID	Name	Institute	Abstract ID	Paper Title
42	QMAT2024_0258	Dr Sidharth Rammohan	Kindai University, Japan	qmat2024_259	Tailoring the Phonon Environment of Embedded Rydberg Aggregates
43	QMAT2024_0267	Dr Sibaram Ruidas	International Centre for Theoretical Sciences	qmat2024_219	Onset and growth of many-body classical chaos
44	QMAT2024_0273	Mr Nikhlesh Singh Mehta	Indian Institute of Science Education and Research Mohali	qmat2024_232	High Tc superconductivity in an elemental metal under mesoscopic point-contacts
45	QMAT2024_0276	Ms Mouli RoyChowdhury	Indian Institute of Technology Guwahati	qmat2024_277	Frustration driven low-temperature spin-glass behavior and short-range correlations in tri-cation spinel
46	QMAT2024_0279	Dr Hillol Biswas	Harish Chandra Research Institute	qmat2024_237	Various phases of a discrete time crystal in driven central spin model
47	QMAT2024_0282	Mr MIJANUR ISLAM	IIT Guwahati	qmat2024_242	Electron-phonon coupling induced topological phase transition in an α - T_3 Haldane-Holstein model
48	QMAT2024_0283	Mrs ADITI CHAKRABARTY	NATIONAL INSTITUTE OF TECHNOLOGY, ROURKELA	qmat2024_263	Absence of Wannier-Stark localization and skin effect in driven non-Hermitian systems
49	QMAT2024_0303	Mr Jyothis V V	NISER, Bhubaneswar	qmat2024_295	Stability of Topological Magnons on Pyrochlore Lattice: The Role of Interactions
50	QMAT2024_0306	Mr Somak Basistha	Tata Institute of Fundamental Research	qmat2024_297	Linear and Non-Linear response in the mixed state of superconducting NbN and a-MoGe thin films using a low-frequency two-coil mutual inductance technique
51	QMAT2024_0310	Ms Akriti Singh	Indian Institute of Science Education and Research (IISER) Bhopal	qmat2024_294	Investigating temperature-induced structural phase transition in Double Perovskite oxides
52	QMAT2024_0312	Mr Rishabh Duhan	Tata Institute of Fundamental Research, Mumbai	qmat2024_276	Origin of superconductivity in W thin films
53	QMAT2024_0313	Dr Sudipta Moshat	Institute of Physics	qmat2024_284	Half-metallic ferromagnetism in transition metal ion doped hybrid perovskite material: A first-principles study
54	QMAT2024_0322	Mr Ankit Gill	Indian Institute of Technology Kanpur	qmat2024_285	Speed Limits and Scrambling in Krylov Space
55	QMAT2024_0323	Dr Sudipta Chakraborty	IIT Guwahati	qmat2024_286	Optically enhanced negative differential resistance in reduced graphene oxide coated silicon nanorods
56	QMAT2024_0333	Dr Ankita Bhattacharya	Uppsala University	qmat2024_298	Electric field induced second-order anomalous Hall transport in unconventional Rashba system

List of Participants Presenting Talks

SL. No	Registration ID	Name	Institute	Abstract ID	Paper Title
57	QMAT2024_0335	Dr Abhishek Maiti	Universit� Paris Saclay	qmat2024_299	Visualizing vibron-mediated electron `pairing'
58	QMAT2024_0338	Dr SURAJIT DUTTA	Weizmann Institute of Science	qmat2024_302	Visualizing isospin magnetic texture in rhombohedral tetralayer graphene
59	QMAT2024_0343	Mr Swarup Kanti Sarkar	IIT Guwahati	qmat2024_306	Interaction-induced spin-dependent localization of spin-1/2 Bose-Einstein condensates in a random disorder potential
60	QMAT2024_0346	Ms Shalini Verma	Indian Institute of Technology Guwahati	qmat2024_311	Investigation of Structural, Magnetic, and Dielectric Behavior in Nd-Doped Gd ₃ Fe ₅ O ₁₂ multiferroic samples