

BOSE FEST 2022

27-29 APRIL, 2022

PROGRAMME SCHEDULE

☪☪ DAY 1: 27.04.2022 (Wednesday) ☪☪

Inauguration & Oral Presentation Session | Venue: Silver Jubilee Hall

Time	Programme	
09:00 A.M to 10:00 A.M	<i>Registration</i>	
10:15 A.M to 10:30 A.M	<i>Inaugural Programme</i> <ul style="list-style-type: none">- <i>Lighting the lamp</i>- <i>Welcome Address by Professor Tanusri Saha Dasgupta, Director</i>- <i>Address by Professor Amitabha Lahiri, Dean (Academic Programme)</i>	
Time	Speaker	Title of the talk
10:30 A.M to 10:45 A.M	Aayatti Mallick Gupta	<i>Effect on the conformations of spike protein of SARS-CoV-2 due to mutation</i>
10:45 A.M to 11:00 A.M	Aishwaryo Ghosh	<i>Understanding the Trend in Core-Shell Preferences for Bimetallic Nanoclusters: A Machine Learning Approach</i>
11:00 A.M to 11:15 A.M	Amrita Mondal	<i>Composition and Temperature Dependent Dielectric Relaxation Study in PVA/water Hydrogel: Impact of Chain Length and Possible Origin of Relaxation Timescales</i>
11:15 A.M to 11:30 A.M	Animesh Hazra	<i>Hydrodynamics of the Manna sandpile</i>
11:30 A.M to 12:00 noon (Tea Break)		
Time	Speaker	Title of the talk
12:00 noon to 12:15 P.M	Anirban Roy Chowdhury	<i>Entanglement wedge cross-section for noncommutative Yang-Mills theory</i>
12:15 P.M to 12:30 P.M	Ankur Srivastav	<i>Vortices in a Rotating Holographic Superfluid</i>
12:30 P.M to 12:45 P.M	Ardhendu Pal	<i>Study of l-type doubling in N₂O isotopologue using cavity ring-down spectroscopy</i>
12.45 P.M to 01:00 P.M	Biswajit Panda	<i>Direct and 2f-wavelength modulation spectroscopy of NO and OCS using an astigmatic multipass cell coupled with a mid-IR 5.2 μm cw-QCL</i>
01:00 P.M to 2:30 P.M (Lunch Break)		

Time	Speaker	Title of the talk
2:30 P.M to 2:45 P.M	Buddhadeb Pal	<i>Quasi-one-dimensional superconductivity in single crystal of (TaSe₄)₃I</i>
2:45 P.M to 3:00 P.M	Debashis Saha	<i>The inconsistency in quantum theory</i>
3:00 P.M to 3:15 P.M	Debayan Mondal	<i>Jump to Molecular Contact in A Single Molecular Junction and Post Rupture Evolution</i>
3:15 P.M to 3:30 P.M	Edwine Tendong	<i>Viscoelastic response of fluid trapped between two dissimilar van der Waals surfaces</i>
03:30 P.M to 04:00 P.M (Tea Break)		
Time	Speaker	Title of the talk
4:00 P.M to 4:15 P.M	Ipsita Basu	<i>Rational Design Principle Towards Allosteric Inhibitor for PCSK9-LDLR Interaction</i>
4:15 P.M to 4:30 P.M	Jyotirmoy Sau	<i>Anomalous transport driven by topological Nodal line in ferromagnetic compound Fe₃GeTe₂</i>
4:30 P.M to 4:45 P.M	Kanchan Meena	<i>A Mechanism to Attract Electrons</i>
4:45 P.M to 5:00 P.M	Monalisa Chatterjee	<i>Ferromagnetically coupled Shastry-Sutherland lattice: Ground state properties and quantum phase diagram</i>
5:00 P.M to 5:15 P.M	Narayan Chandra Maity	<i>Spatio-temporal heterogeneity in octanol rich region: time resolved fluorescence measurements</i>
5:15 P.M to 5:30 P.M	Parushottam Majhi	<i>Observation of supercooled metallic phases below metal-insulator transition temperature (T_M) in NdNiO₃ film and understanding the phenomena with a Monte-Carlo simulative approach</i>
5:30 P.M to 5:45 P.M	Piyali Saha	<i>Investigation of the Radiation Driven Implosion in L1616</i>
5:45 P.M to 6:00 P.M	Prasanta Kundu	<i>A Revisit to Turnover Kinetics of Individual Escherichia coli β-Galactosidase Molecules</i>
6:00 P.M to 6:15 P.M	Saheli Samanta	<i>Observation of giant exchange bias effect in Ni-Mn-Ti all-d-metal Heusler alloy</i>

06:15 P.M onwards: | **Photo-Fest** | Venue: Radhachura Dining Hall

☪ DAY 2: 28.04.2022 (Thursday) ☪

Oral Presentation Session | Venue: Silver Jubilee Hall

Time	Speaker	Title of the talk
10:30 A.M to 10:45 A.M	Prasun Boyal	<i>Robust antiferromagnetism in NaOsO₃ under pressure</i>
10:45 A.M to 11:00 A.M	Premashis Kumar	<i>Control of energy, dissipation, and error in kinetic proofreading through chemostatted concentration</i>
11:00 A.M to 11:15 A.M	Rafiqul Alam	<i>Investigation of non-trivial electronic band in layered Lanthanum based Silver Antimonide (LaAgSb₂)</i>
11:15 A.M to 11:30 A.M	Rajib Kumbhakar	<i>Optical Photometric Variability in Young Brown Dwarfs and Very Low Mass Stars in the Taurus Star-Forming Region</i>
11:30 A.M to 12:00 noon (Tea Break)		
Time	Speaker	Title of the talk
12:00 noon to 12:15 P.M	Ria Saha	<i>Multivalent cation induced phase separation in proteins: ion specific THz hydration studies</i>
12:15 P.M to 12:30 P.M	Ruchi Pandey	<i>Study of 2021 outburst of the recurrent nova RS Ophiuchi: Photoionization and morpho-kinematic modeling</i>
12:30 P.M to 12:45 P.M	Anwasha Chakraborty	<i>Symmetries of Kappa Deformed Space-time and Relativistic Particle Dynamics</i>
12.45 P.M to 01:00 P.M	Snehamoyee Hazra	<i>High performance piezoelectric nanogenerator based on BTO-PVDF nanocomposites</i>
01:00 P.M to 02:30 P.M (Lunch Break)		
Time	Speaker	Title of the talk
2:30 P.M to 2:45 P.M	Shiladitya Karmakar	<i>High-performance thermoelectric properties of strained two-dimensional tellurium</i>
2:45 P.M to 3:00 P.M	Shobhan Dev Mandal	<i>Effect of receptor clustering on E.coli chemotaxis: Sensing versus adaptation</i>
3:00 P.M to 3:15 P.M	Shubham Purwar	<i>Coexistence of superconductivity and ferromagnetism in magnetically anisotropic Sn intercalated Cr₃Te₄</i>

3:15 P.M to 3:30 P.M	Siddhartha Biswas	<i>Studies of the pre-main sequence stars in the H II region Sh2-87</i>
3:30 P.M to 4:00 P.M (Tea Break)		
Time	Speaker	Title of the talk
4:00 P.M to 4:15 P.M	Soumya Chakrabarti	<i>Scalar-Fermion Interaction as the Driver of Cosmic Acceleration</i>
4:15 P.M to 4:30 P.M	Sreya Pal	<i>Direct measurement of interfacial Dzyaloshinskii–Moriya interaction and atomic layer thickness dependence in a ferromagnet-WS₂ heterostructure</i>
4:30 P.M to 4:45 P.M	Suchetana Mukhopadhyay	<i>Femtosecond laser-induced ultrafast spin dynamics in ferromagnetic thin films: comparative study using two theoretical models</i>
4:45 P.M to 5:00 P.M	Sudipta Chatterjee	<i>Slow relaxation and decoupling of electrons from the phonon bath as a precursor of Mott metal-insulator transition</i>
5:00 P.M to 5:15 P.M	Sumana Pyne	<i>Addition of cholesterol alters the hydration at the surface of model lipids: a spectroscopic investigation</i>
5:15 P.M to 5:30 P.M	Sumit Nandi	<i>Monogamy of entanglement</i>
5:30 P.M to 5:45 P.M	Susanta Ghosh	<i>Anomalous Hall Effect Studies of Stoichiometric Mn₃Ge</i>
5:45 P.M to 6:00 P.M	Tanmoy Chakraborty	<i>Bulk-diffusion and anomalous transport of self-propelled particles</i>

06:00 P.M onwards | **Photo Fest** | Venue: Radhachura Dining Hall

☪ DAY 3: 29.04.2022 (Friday) ☪

10:30 AM to 12:30 PM | **Poster Presentation** | Venue: Basundhara

Sl. No.	Presenter	Title
P1	Abhik Ghosh Moulick	<i>Conformational fluctuations and binding in molten globule state of α-lactalbumin</i>
P2	Ariful Hoque	<i>Variations in CO-to-H₂ Column Density Ratio in Star-forming Filaments</i>
P3	Arun Kumar Das	<i>Resource theoretic efficacy of the single copy of a two-qubit entangled state in a sequential network</i>
P4	Dhrubajyoti Majhi	<i>Solubility enhancement of paracetamol in choline chloride-based deep eutectic solvents: Atomic insights using molecular dynamics simulation</i>
P5	Dibyendu Maity	<i>Effect of additives on the growth of methane hydrate</i>
P6	Didhiti Bhattacharya	<i>Two-dimensional Mo_xW_{1-x}S₂ alloys for nanogenerators producing record piezo-output and coupled photodetectors for self-powered UV Sensor</i>
P7	Diya Ram	<i>Magnetic Activity of M-dwarfs: Optical and NIR Spectroscopic Studies</i>
P8	Gesesew H Reta	<i>Photo-ionization and Morpho-kinematic Study of V477 Sct</i>
P9	Ishita Jana	<i>Improvement of magnetic and electric properties of Co doped GaFeO₃ ceramics</i>
P10	Jayanta Mondal	<i>Temperature dependent dielectric relaxation measurement of an amino acid derivative based deep eutectic solvent: origin of timescales via experiment and molecular dynamics simulation</i>
P11	Koushik Pradhan	<i>Exploration of the Origin of Magnetism in Potassium Manganese Tellurides</i>
P12	Krishnendu Patra	<i>Perturbing the bond disproportionated state in NdNiO₃</i>
P13	Manjari Dutta	<i>Investigation of a harmonic oscillator in a magnetic field with damping and time dependent noncommutativity</i>
P14	Monodip	<i>Spin Peierls transition of J₁ – J₂ and extended models with ferromagnetic J₁. Sublattice dimerization and thermodynamics of zigzag chains in β-TeVO₄</i>
P15	Nishant Garg	<i>Relation between filaments and clumps in a few Galactic star-forming regions</i>
P16	Pratap Kumar Pal	<i>Variation of Magnon–Magnon Coupling Strength with Microwave Power and Bias-Field Angle in Ni₈₀Fe₂₀ Nanocross Array</i>
P17	Rahul Karmakar	<i>Tracer motion through an entangled polymeric network within a confined asymmetric geometry in presence of a driving force</i>

Sl. No.	Presenter	Title
P18	Riju Pal	<i>Anomalous Hall Effect in a Two-dimensional van der Waals Ferromagnet Fe₄GeTe₂</i>
P19	Ritwick Sarkar	<i>Boundary resetting driven transport in harmonic chain</i>
P20	Saikat Mitra	<i>Theoretical and Experimental study of Universal Ammonia Gas Sensing by Family of Lead Halide Perovskites ABX₃ (A= CH₃NH₃, CH(NH₂)₂, B=Pb, X=Br, I)</i>
P21	Samir Rom	<i>Designing oxide heterostructure with improved physical properties: A case study of the SIO/LCO (SrIrO₃/LaCoO₃) heterostructure</i>
P22	Shivam Mishra	<i>Nanoplatelets of CdSe - Why do they form?</i>
P23	Shubhrasish Mukherjee	<i>High Responsivity UV-Visible Broadband Phototransistor Based on Graphene - WS₂ Heterostructure</i>
P24	Sk Saniur Rahaman	<i>Machine Learning approach to study quantum phases of a frustrated one dimensional spin-1/2 system</i>
P25	Soham Saha	<i>p-ZnCo₂O₄/n-ZnO Nano-heterojunction Photoanode for Photoelectrochemical Water Splitting</i>
P26	Soham Sen	<i>Equivalence principle and HBAR entropy of an atom falling into a quantum corrected black hole</i>
P27	Soma Dutta	<i>Role of Spin Transport on Ultrafast Demagnetization in β-Ta/Co₂₀Fe₆₀B₂₀ Bilayers</i>
P28	Soumen Mondal	<i>Observation of Imbert–Fedorov shift in monolayer MoS₂ via quantum weak measurement</i>
P29	Soumyadipta Chakraborty	<i>High-resolution ro-vibrational spectral analysis of dideutero-methane isotopomer (¹²CH₂D₂) in the ν₉(B₂) fundamental band</i>
P30	Subhajit Kar	<i>Spectroscopic study of [KSF2015] 1381-19L: A high temperature WC9-type star</i>
P31	Subhankar Bera	<i>Nonclassical temporal correlation powers quantum random access codes</i>

04:00 P.M to 08:00 PM | **Cultural Programme** | Venue: Purbashree Auditorium, EZCC

08:15 P.M to 09:30 PM | **Family Dinner** | Venue: Food Court, EZCC