

Day-1 (27/04/2022)

Time	Speaker	Department	Topic
Session I (Chair - Ranjini Bandyopadhyay)			
9:30 AM	Director's Inaugural address		
9:45 AM	Tarun Souradeep	AA	Tests of fundamental assumptions in cosmology
10:00 AM	Saurabh Kaushik	SCM	Quantitative Study of Cell Mechanics
10:15 AM	Saptarishi Chaudhuri	LAMP	The Quantum Mixture Laboratory: An overview
10:30 AM	Ion Santra	TP	Effect of tax dynamics on linearly growing processes under stochastic resetting: A possible economic model
10:45 AM	Urbasi Sinha	LAMP	Loophole-Free Interferometric Test of Macrorealism Using Heralded Single Photons
High Tea			
Session II (Chair - Sanjib Sabhapandit)			
11:20 AM	Mandira Pal	LAMP	Precision Metrology using Optical Weak measurements
11:35 AM	Subhadip Ghosh	SCM	Banded spherulite formation by a thermotropic liquid crystal
11:50 AM	Supurna Sinha	TP	Measurements and analysis of response function of cold atoms in optical molasses: a perspective
12:05 PM	Tanuman Ghosh	AA	Hard X-ray flaring in an ultraluminous X-ray source
12:20 PM	Subhajit Bhar	LAMP	Experimental observation of the linear response of cold atoms subject to a transient force
Lunch			

Session III (Chair - Saptarishi Chaudhuri)			
2:00 PM	Rahul Sharma	AA	AstroSAT view of the Accretion-powered Millisecond X-ray Pulsars
2:15 PM	Animesh Sinha Roy	LAMP	Robustness of Intra Particle Entanglement under Quantum Decoherence
2:30 PM	Keerthipriya S	EEG	Development of RF over fiber modules for Radio Telescopes and Radiometers
2:45 PM	Vishnu Deo Mishra	SCM	Layer undulation in bent-core liquid crystals
3:00 PM	Raghunathan Agaram	EEG	Square Kilometer Array Project : RRI's Initiatives in Engineering and Developmental activities
3:15 PM	Sonali Sachdeva	AA	Dust in the Universe
High Tea			
Session IV			
4:00 PM - 6:00 PM	Poster presentations		

Day-2 (28/04/2022)

Time	Speaker	Department	Topic
Session V (Chair - Ritu Nehra)			
9:00 AM	Sanjukta Roy	LAMP	Quantum Technologies with ultra-cold Rydberg atoms
9:15 AM	Zaibudeen A.W.	SCM	Correlating the drying kinetics and dried morphologies of aqueous colloidal gold droplets of different particle concentrations
9:30 AM	Sanhita Kabiraj	AA	Diagnostics of the super-orbital intensity variation in LMC X-4
9:45 AM	Sreyas P. Dinesh	LAMP	Cavity QED Experiments For Multilevel Quantum Systems
10:00 AM	Dipak Patra	SCM	Time Dependent Ginzburg-Landau model for Banded Spherulitic Growth
10:15 AM	Mohamed Ibrahim	MES	Mechanical Engineering Services
High Tea			
Session VI (Chair - Vikram Rana)			
11:00 AM	Silpa B S	LAMP	Transition frequency measurement of highly excited Rydberg states of ^{87}Rb for a wide range of principal quantum numbers
11:15 AM	Joseph Samuel	TP	Why radioastronomers need to understand Holonomy/Wilson loops
11:30 AM	Hemanth M	AA	Probing the accretion environment of GX 301-2 during its spin-up phase

11:45 AM	Kaumudibikash Goswami	LAMP	Experimental characterisation of a non-Markovian quantum process
12:00 PM	Sachidananda Barik	SCM	Origin of two distinct stress relaxation regimes in shear jammed dense suspensions
12:15 PM	Keerthipriya S	EEG	Design of compact analog beam former for low frequency applications
12:30 PM	Anirban Dutta	AA	X-ray Properties of the Cataclysmic Variable Stars
Lunch			
2:00 PM	Open House discussion		
High Tea			
4:20 PM - 6:00 PM	Quiz and other events		

Day-3 (29/04/2022)

Time	Speaker	Department	Topic
Session VII (Chair - Sayantan Majumdar)			
9:00 AM	Ritu Nehra	TP	Topological aspects of a multi-partite non-Hermitian Su-Schrieffer-Heeger model
9:15 AM	Sagar Sutradhar	LAMP	Design, implementation and characterization of a dual species magneto-optical trap of bosonic ^{23}Na and bosonic ^{39}K atoms with large atom numbers
9:30 AM	Mohammad Arsalan Ashraf	SCM	Bio-mechanics of growing neurons
9:45 AM	Mayuri S	AA	A space based cosmology experiment from RRI
10:00 AM	Dibyendu Roy	TP	Many-body quantum chaos
10:15 AM	Sourav Chatterjee	LAMP	QKD protocol implementations in the QUEST project
High Tea			
Session VIII (Chair - Urbasi Sinha)			
11:00 AM	Satya Ranjan Behera	LAMP	Effects of the static and dynamic properties of the atmosphere on uplink based quantum communications in space
11:15 AM	Sebanti Chattopadhyay	SCM	Inter-particle adhesion induced strong mechanical memory formation in a dense granular suspension
11:30 AM	Sanjib Sabhapandit	TP	Universal framework for the long-time position distribution of free active particles.

11:45 AM	Ashwin Devaraj	AA	Discovery of a cyclotron line feature in High Mass X-ray Binary GRO J1750-27
12:00 PM	Vardhan Thakar	LAMP	A discussion on Second Order Correlation Function
12:15 PM	Dipanshu Garg	AA	Mathematical representation of Statistical Isotropy of the CMB
Lunch			
Session IX (Chair - Mayuri S)			
2:00 PM	Sumati Surya	TP	Quantum Fields on Causal Sets - Causality, Non-locality and Entanglement
2:15 PM	Sayan Saha	AA	Eppur si muove
2:30 PM	Prabu T	EEG	Overview of the Square Kilometre Array Project activities at RRI
2:45 PM	Suraka Bhattacharjee	TP	Quantum Langevin Dynamics of a harmonically oscillating Brownian particle in a magnetic field
3:00 PM	Anand Prakash	LAMP	Precision Ion Trap for Quantum Interaction and Optical Clock Experiments
3:15 PM	Vaibhav Raj Singh Parmar	SCM	An experimental study of desiccation cracking in charged colloidal clay suspensions
High Tea			
Cultural Night and Banquet Dinner			