

## Program

<b>Monday Mar 12</b>	
9:00 – 9:45	Registration
9:45-10:00	Opening Address
	<b>Session I</b>
	<b>Session Chair: Michael Berry</b>
10:00 – 10:30	Alexander Mikhailov Elastic-Network Modeling of Motor Protein
10:30 – 11: 00	A. Khare Soliton Solutions in Dirac Equation with Arbitrary Nonlinearity
11:00 – 11:30	Yeshpal Singh Optical Clocks: Unprecedented Precision
11:30 – 12:00	<b>Tea Break</b>
	<b>Session II</b>
	<b>Session Chair: Alexander Mikhailov</b>
12:00 – 12:30	Ram Ramaswamy Time-delay coupled phase oscillators on a bipartite network
12:30 – 13:00	Ravindra E. Amritkar Amplitude Death in Coupled Dynamical Systems
13:00 – 13:30	M. Lakshmanan Simultaneous Occurrence of ERS and ERD in Coupled Nonlinear Oscillator Sub-systems
13:30 – 14:30	<b>Lunch Break</b>
	<b>Session III</b>
	<b>Session Chair: M. Lakshmanan</b>
14:30 – 15:00	S. S. Manna About the Fastest Growth of the Order Parameter in Models of Percolation
15:00 – 15:30	Gautam Sethia TBA
15:30 – 16:00	Sushanta Dattagupta Third Law of Thermodynamics in the Context of Dissipative Diamagnetism
16:00 – 16:30	<b>Tea Break</b>
	<b>Session IV</b>
16:30 –	Felicitation of Prof. Jayanta K. Bhattacharjee followed by High Tea

## Program

<b>Tuesday Mar 13</b>	
	<b>Session I</b>
	<b>Session Chair: Ravindra E. Amritkar</b>
09:30 – 10:00	Michael Berry Superoscillations and Weak Measurement
10:00 – 10:30	Anindya Ghose Chaudhury Hamiltonization of Dynamical Systems and Jacobi's Last Multiplier
10:30 – 11:00	V. Ravishankar Separability of Two Quasi States: New Wine in Old Bottle
11:00 – 11:30	<b>Tea Break</b>
	<b>Session II</b>
	<b>Session Chair: Sudeshna Sinha</b>
11:30 – 12:00	Amita Das The Propagation of Slow Electromagnetic Disturbances in Plasmas
12:00 – 12:30	Peter Leach A Novel Riccati Sequence
12:30 – 13:00	Shankar P. Das Nonlinear Dynamics of Dense Liquids and Ergodicity-Nonergodicity Transitions
13:00 – 14:00	<b>Lunch Break</b>
	<b>Session III</b>
	<b>Session Chair: Gautam Sethia</b>
14:00 – 14:30	Soumitro Banerjee Analyzing the Bifurcations of Ergodic Tori Using a Second Poincaré Section
14:30 – 15:00	Sudeshna Sinha "Logical" Interplay of Noise and Nonlinearity
15:00 – 15:30	G. Ambika Complexity and Connectivity
15:30 – 16:00	<b>Tea Break</b>
	<b>Session IV:</b>
	<b>Session Chair: S.S. Manna</b>
16:00 – 16:30	K.P.N.Murthy Simulation of a Switching Experiment on an Ideal Gas Using Fluctuating Lattice Boltzmann Model
16:30 – 17:00	Arijit Bhattacharyay Equilibrium Ratcheting
17:00 – 17:30	Punyabrata Pradhan Thermodynamic Theory of Phase Transition in Driven Lattice Gases

## Program

<b>Wednesday Mar 14</b>	
	<b>Session I</b>
	<b>Session Chair: Sanjay Puri</b>
09:30 – 10:00	Somendra M. Bhattacharjee Entanglement Entropy, Quantum Criticality and DNA
10:00 – 10:30	Pinaki Majumdar The "Pairing Field" in Superconductivity
10:30 – 11:00	Krishnendu Sengupta Dynamics of Ultracold Atoms in a Tilted Lattice
11:00 – 11:30	<b>Tea Break</b>
	<b>Session II</b>
	<b>Session Chair: Krishnendu Sengupta</b>
11:30 – 12:00	Sanjay Puri Cooling and Brownian Motion in Viscoelastic Granular Gases
12:00 – 12:30	Bishwajyoti Dey Bloch Oscillation and Dynamical Phase Diagrams of the Bose-Einstein Condensate in Deep Optical Lattice
12:30 – 13:00	Rahul Pandit Eulerian, Lagrangian, and Quasi-Lagrangian studies of Two-dimensional Fluid Turbulence
13:00 – 14:00	<b>Lunch Break</b>
14:00 – 16:00	<b>Poster Session</b>
16:00 -	<b>Director's High Tea</b>

## Program

<b>Thursday Mar 15</b>	
	<b>Session I</b>
	<b>Session Chair: Debshankar Roy</b>
09:30 – 10:00	R. Rajesh Isotropic-Nematic-Disorder Transitions in a System of Long Rods on a Lattice
10:00 – 10:30	N. Santhanam Extreme Events and Event-size Fluctuations on Complex Networks
10:30 – 11:00	Neelima M. Gupte Bifurcation, Crisis and Unstable Dimension Variability in the Coupled Sine Circle Map System
11:00 – 11:30	<b>Tea Break</b>
	<b>Session II</b>
	<b>Session Chair: Amit Dutta</b>
11:30 – 12:00	Chandan Dasgupta Chaos in the Rheology of Complex Fluids
12:00 – 12:30	Bikas Chakrabarti Econophysics of Income and Wealth Distributions in Societies
12:30 – 13:00	Pragya Shukla Typical Weak and Superweak Values
13:00 – 14:00	<b>Lunch Break</b>
	<b>Session III</b>
	<b>Session Chair: R. Rajesh</b>
14:00 – 14:30	Mahendra Verma Field-Theoretic Treatment of Turbulence
14:30 – 15:00	Amit Dutta Ising Spin Chain with Inverse-square Interaction
15:00 – 15:30	Debshankar Roy Quantum Brownian Motion in a Spin-bath
15:30 – 16:00	<b>Tea Break</b>
	<b>Session IV</b>
	<b>Session Chair: Neelima Gupte</b>
16:00 – 16:30	Mithun Mitra Modified coarsening kinetics in presence of free energy barrier
16:30-16:45	Dhruba Banerjee TBA
16:45 – 17:00	Shyamal Biswas Excess Energy of an Ultracold Fermi Gas in a Trapped Geometry
17:00 – 17:15	Debasish Mondal Geometry Controlled Dynamics of a Brownian particle
17:15-17:30	Leishangthem Premkumar The Free Energy Landscape of the Supercooled Metastable States

## Program

<b>Friday Mar 16</b>	
	<b>Session I</b>
	<b>Session Chair: Abhik Basu</b>
09:30 – 10:00	Rajaram Nityananda Wave Propagation in a Random Medium under Conditions of Nearly Forward Scattering
10:00 – 10:30	Krishna Kumar TBA
10:30 – 11: 00	Indrani Bose Binary Gene Expression: Origins and Consequences
11:00 – 11:30	<b>Tea Break</b>
	<b>Session II</b>
	<b>Session Chair: Chandan Dasgupta</b>
11:30 – 12:00	Surajit Sengupta TBA
12:00 – 12:30	Abhik Basu Universality of scaling and multiscaling in turbulent symmetric binary fluids
12:30 – 13:30	<b>Lunch Break</b>
	<b>Session III</b>
	<b>Session Chair: Rajatram Nityananda</b>
13:30 – 14:00	Prasanta Panigrahi PT-symmetric systems: Bound and scattering state properties
14:00 – 14:30	Mustansir Barma TBA
14:30 – 15:00	Anirban Sain Shape Transformations during Eukaryotic Cell Division
15:00 – 15:30	<b>Tea Break</b>
	<b>Session IV</b>
	<b>Session Chair: Surajit Sengupta</b>
15:30 – 16:00	Sakuntala Chatterjee Nonequilibrium Work Fluctuation in Driven Dissipative Systems
16:00 – 16:30	Abhijit Mookerjee TBA
16:30 – 17:00	Jaydeb Chakrabarti Conformational Contribution to Thermodynamics