

TSU@25 Conference

Program Schedule

Day 1: 28th October 2021

Session 1 - 9:00 AM - 9:30 AM

Inauguration

Session 2 - 9:30 AM - 10:45 AM- Chair person- Raju Kumar Biswas

- 9:30 AM - 9:55 AM Kondo effect in open quantum systems - N S Vidhyadhiraja- **Offline mode**
- 9:55 AM - 10:20 AM Non-equilibrium dynamics of Solvent around Laser-Heated Janus Colloids - **Sutapa Roy- Online mode**
- 10:20 AM - 10:45 AM Diffusion and sintering of ultrasmall nanoparticles: Mechanisms & scaling relations - **Shobhana Narasimhan - Offline mode**

Tea Break (10:45 AM - 11:30 AM)

Session 3 - 11:30 AM - 12:45 PM- Chair person- Surabhi Menon

- 11:30 AM - 11:55 AM Theory of a benzene transistor: symmetry, strong correlations and quantum interference - **Sudeshna Sen- Online mode**
- 11:55 AM - 12:20 PM Binary- and Ternary-fluid Turbulence: An Introduction - **Rahul Pandit- Online mode**
- 12:20 PM - 12:45 PM Sufficient Statistic in Quantum Theory - **Kalyan B Sinha- Online mode**

Lunch Break (12:45 PM - 2:10 PM)

Session 4 - 2:10 PM - 3:25 PM- Chair person- Aashish Kumar

- 2:10 PM - 2:35 PM Flat-band-induced non-Fermi-liquid behavior of multicomponent fermions- **Pramod Kumar- Online mode**
- 2:35 PM - 3:00 PM Novel Nanocatalysts from Ligand-Stabilized Metal Nanoclusters - **Nisha Mammen - Online mode**
- 3:00 PM - 3:25 PM Genomics signatures of host-parasite coevolution - **Sona John- Online mode**

Tea Break (3:25 PM - 4:00 PM)

Session 5 - 4:00 PM - 5:15 PM- Chair person- Arpan Das

- 4:00 PM - 4:25 PM Post Translational Modifications Induced Structural Reorganization in Tau Protein - **Sairam S Mallajosyula- Online mode**
- 4:25 PM - 4:50 PM 2D materials in the spot "light": the emergence of advanced optical properties - **Sharmila Shirodkar- Online mode**
- 4:50 PM - 5:15 PM Estimation of the equilibrium free energy for glasses using the Jarzynski equality - **Vinutha H A- Online mode**

Day 2: 29th October 2021

Session 1 - 9:30 AM - 10:45 AM- Chair person- Nalina V

- 9:30 AM - 9:55 AM Multi-Scale Modelling and Theory of Structural Phase Transitions - **Umesh V Waghmare- Offline mode**
- 9:55 AM - 10:20 AM Flow and flow cessation properties of soft dense disordered materials - **Vishwas Vasisht- Online mode**
- 10:20 AM - 10:45 AM Mpemba Effect: Surprising, yet common? - **Subir K Das- Offline mode**

Tea Break (10:45 AM - 11:30 AM)

Session 2 - 11:30 AM - 12:45 PM- Chair person- Sachin K

- 11:30 AM - 11:55 AM Crystal nucleation and liquid-liquid transition in supercooled silicon- **Srikanth Sastry- Offline mode**
- 11:55 AM - 12:20 PM Slow quench dynamics in classical systems - **Kavita Jain- Offline mode**
- 12:20 PM - 12:45 PM Multiscale lattice dynamics and emergent phenomena: Flexibility and Boson peaks of crystalline materials - **Meha Bhogra- Online mode**

Lunch Break (12:45 PM - 2:10 PM)

Session 3 - 2:10 PM - 3:25 PM- Chair person- Krishna K Tiwari

- 2:10 PM - 2:35 PM First-Principles Modelling of Optoelectronics and Charge-Transport in Functional Molecules and Materials - **Arun K Manna- Online mode**
- 2:35 PM - 3:00 PM Multiple proton transfers in Molecular Crystals: Role of nuclear quantum effects - **Prasenjit Ghosh- Online mode**
- 3:00 PM - 3:25 PM Quantum Modeling of Molecules and Materials for Various Applications - **Swapan K Pati- Offline mode**

Tea Break (3:25 PM - 4:00 PM)

Session 4 - 4:00 PM - 5:15 PM- Chair person- Himanshu Joshi

- 4:00 PM - 4:25 PM Knots are Generic Stable Phases in Semiflexible Polymers - **Suman Majumder - Online mode**
- 4:25 PM - 4:50 PM Exclusion Process with Dynein inspired dynamics - **Priyanka- Online mode**
- 4:50 PM - 5:15 PM Trace formula for pair of contractions - **Arup Chattopadhyay- Online mode**