



Survey No. 36/P, Gopanpally Village, Serilingampally, Ranga Reddy Dist., Hyderabad - 500 046

## Students' Annual Seminar

## **Nature of Four-point Dynamic** Susceptibility in Supercooled Active Glassforming liquid

## Subhodeep Dey

Active glass is a constituent of active and disordered systems in supercooled regime. Recently the dynamics of some biological systems have shown similarity with that of already known passive glassy system. Now to mimic some of the complex biological systems more realistically one of the simplest approach is to simulate disordered glassy system in the presence of activity. To understand the fundamental nature of biological system it becomes crucial to study the dynamical properties of this active glass systematically. One of the quantifier of the glassiness of the system is the dynamic heterogeneity (DH), which we will quantify in terms of dynamic susceptibility. Here we have studied that active glass has a strong influence of activity on the dynamic susceptibility and it can be used to estimate the amount activity present in the system.

Friday, May 19th 2023 4:00 PM (Tea / Coffee 03.45 PM) Seminar Hall, TIFR-H