Tata Institute of Fundamental Research
Survey No. 36/P, Gopanpally Village, Serilingampally, Ranga Reddy Dist., Hyderabad – 500 046

Students' Annual Seminar

Tau and its variants undergoes different kinetic pathways

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Tau protein is known to be involved in multiple neurodegenerative diseases such as Alzheimer's disease (AD), Frontotemporal dementia with Parkinsonism (FTDP-17), Pick's disease (PiD) and many others. Recent studies have revealed that Tau undergoes liquid-liquid phase separation (LLPS) in the presence of crowding agents and RNAs both in-vivo and in-vitro. We aim to study the microscopic kinetic processes, such as nucleation and elongation inside and outside Tau LLPS. Also, we attempted to see the effect of different variants of Tau on different microscopic kinetic parameters, e.g., PiD (3R) Tau fragmentation process using our home-built real-time TIRF microscope.

Monday, May 8th 2023

4:00 PM (Tea / Coffee 03.45 PM)

Seminar Hall, TIFR-H