

MONDAY

COLLOQUIUM

An interdisciplinary approach to understand protein aggregation in neurodegenerative diseases

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16 Dec 2024 (Monday) | 16:00 Hrs (Tea / Coffee 15:45 Hrs) | Venue: TIFRH Auditorium

Protein aggregation is involved in multiple neurodegenerative diseases such as Alzheimer's and Parkinson's disease. However, the mechanisms of initiation, growth and proliferation of aggregation remain unclear despite extensive research conducted in this area over past three decades highlighting complex nature of the problem. In this talk I will give a brief overview of the existing puzzles. Then describe our efforts in building state of the art single molecule techniques to perform novel experiments to understand the early events of protein aggregation. Finally, I will discuss how interdisciplinary approaches involving experiments, theory and computation can help to untangle the puzzle.