TIFR Centre for Interdisciplinary Sciences, Narsingi, Hyderabad 500075

Seminar

Molecular Simulations of Biological Membranes and Membrane-Associated Phenomena

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Abstract: I use molecular dynamics (MD) simulations and related methods to investigate the self-assembly, phase behavior and interaction networks of a range of soft-matter biological systems. In MD simulations, a complex molecular assembly is modeled by a set of interacting particles, whose spatio-temporal evolution calculated by solving Newton's second law numerically. During this talk, we will discuss some problems that can be addressed from simulations such as exploring ion pathways in ion pumping proteins, understanding taste, the molecular basis of the high triglyceride content in certain cancer cell membranes and the endoplasmic reticulum.

***Date*: Tuesday, February 12th 2013**
***Time*: 11:30AM (Tea/Coffee at 11:15AM)**
***Venue*: Conference Hall, TCIS**

All are cordially invited