



TIFR Centre for Interdisciplinary Sciences, Narsingi, Hyderabad 500075

**One-day Meeting on Soft and Biological Matter**

**28 November 2012**

**Programme**

0855 - 0900 - Welcome and opening remarks (Sriram Ramaswamy)

**Session I: Srikanth Sastry, TCIS, Chair**

0900 - 0925 Mike Sheetz, NUS, Singapore Rigidity  
Sensing by Local Sarcomere Contractions

0925 - 0950 Maithreyi Narasimha, TIFR, Mumbai  
Local non-autonomous control of myosin dynamics: implications for spatial patterning

0950 - 1015 P K Madhu, TIFR, Mumbai  
Probing amyloid fibrils at a molecular level with solid-state nuclear magnetic resonance

1015 - 1040 Sriram Ramaswamy, TCIS, TIFR, Hyderabad  
Designing chemotactic colloids

***1040 - 1110: coffee break***

**Session II: Amit Chattopadhyay, CCMB, Chair**

1110 - 1135 Paul Matsudaira, NUS, Singapore  
The dynamics of interfacial water at the nano-scale

1135 - 1200 P P Rajeev, TCIS, TIFR, Hyderabad  
Transient nanoplasmonics inside transparent matter

1200 - 1225 Surajit Sengupta, TCIS, TIFR Hyderabad  
Activity-induced segregation: chromosome positioning in the nucleus

1225 - 1250 Ramakrishna Ramaswamy, University of Hyderabad  
Correlations in Genomic Sequences

***1250 - 1430: Lunch***

**Session III: Rajaram Nityananda, NCRA, TIFR, Chair**

1435 - 1500 Linda Kenney, NUS, Singapore  
Environmental sensing by bacteria

1500 - 1525 Krishnaveni Mishra, University of Hyderabad  
Sumoylation and subnuclear compartmentalization of proteins

1525 - 1550 Surajit Dhara, University of Hyderabad  
Temperature driven discontinuous surface anchoring transition in liquid crystals

***1550 - 1620: coffee break***

**Session IV: KPN Murthy, Univ of Hyderabad, Chair**

1620 - 1645 Smarajit Karmakar, TCIS, TIFR, Hyderabad  
Elasto-plasticity of amorphous solids

1645 - 1710 Rama Govindarajan, TCIS, TIFR, Hyderabad  
Vortices in density gradients

1710 - 1735 G V Shivashankar, NUS, Singapore  
Nuclear mechanics and genome regulation

1735 – 1800 Srikanth Sastry, TCIS, Hyderabad  
Mechanical Deformation of Amorphous Solids

***1800 HIGH TEA***

***Date: Wednesday, November 28<sup>th</sup> 2012***

***Time: 0855 to 1830***

***Venue: Conference Hall, TCIS***

***All are cordially invited***