TIFR Centre for Interdisciplinary Sciences, Narsingi, Hyderabad 500075

Seminar

Fluids: From driven colloids to active patterns

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Complex fluids (e.g. colloids, gels, active fluids etc.), passive as well as in active domain are important, even in our day-to-day life. Not only in chemistry and biology, recently it has been drawn much attention in physics, particularly in the domain of soft-matter and computational physics. In this talk I will discuss our recent developments on two related projects. First part of the talk will contain drying mediated order-disorder transition of colloidal self assembly. Second part will contain a hydrodynamic description of actomyosin (actin+myosin+passive cross-linkers) network as 'active', viscoelastic fluid from which we will estimate various material properties (e.g. viscosity, elasticity, contractility etc.) of the network that regulate the flow as well as spatiotemporal patterns of density of it.

Wednesday, Nov 20th 2013

4:00 PM (Tea/Coffee at 3:30 PM)

Seminar Hall, TCIS