

Students' Annual Seminar

Statics and dynamics in confluent cellular monolayers

Satyam Pandey

The static and dynamic properties of confluent epithelial monolayers are crucial for various biological processes, such as wound healing, embryogenesis, and cancer progression. The importance of these processes calls for a quantitative understanding of these properties. Recent experiments indicate nearly universal cell shape variability in such systems. Additionally, there is a robust correlation between the average cell shape and cellular dynamics. In this talk, I will discuss both the static properties, encompassing cell shape and the radial distribution function, and the dynamical properties, including collective cell migration and cell divisions within epithelial cells. I will also discuss the correlations among static and dynamic properties.

Thursday, Mar 14th 2024 17:00 Hrs (Tea / Coffee 16:45 Hrs) CR-4, TIFR-H