

Seminar

Exploring the Physics of 2D Polymers through Single-Molecule Studies of Kinetoplast DNA

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Two-dimensional (2D) polymers possess tremendous potential in diverse applications, including flexible electronics, coatings and separation/filtration. Due to their non-trivial topology, it also poses many fundamental problems in statistical physics. Despite recent advances in 2D polymer synthesis, establishing a robust model to study its physical properties still remains an open problem. Nature provides such a model system in the form of giant 2D catenated ring networks called kinetoplasts (kDNA) – a network of thousands of catenated circular DNA. In this talk, we present our experimental findings on kDNA polymer physics.

Tuesday, Oct 3rd 2023

4:00 PM (Tea / Coffee 03.45 PM)

Auditorium, TIFR-H