

Seminar

Chain Reconfiguration in Active Noise

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In this talk, I will focus on the analytical calculation of the reconfiguration time for a single flexible polymer in the presence of active noise. The study suggests that though the mean square displacement of the chain centre of mass grows faster, the chain reconfiguration is always slower in the presence of long-lived active noise which has exponential temporal correlation. Similar behavior is observed for a worm-like semiflexible chain and a Zimm chain. However it is primarily the characteristic correlation time of the active noise and not the strength that controls the increase in the reconfiguration time. In brief, such active noise makes the polymer to move faster but the correlation loss between the monomers becomes slow. This connects to dynamics of biomolecules in bacterial baths.

Thursday, Sep 22nd 2016

4:00 PM (Tea/Coffee at 3:45 PM)

Seminar Hall, TCIS