سمینار هفتگی گروه ماده چگال نرم

DNA: Supercoiling and Mechanical Behavior

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The mechanics of DNA bending on intermediate length scales (5–100 nm) plays a key role in many cellular processes, and is also important in the fabrication of artificial DNA structures, but previous experimental studies of DNA mechanics have focused on longer length scales than these. Recent experiments imply that the elastic energy of highly bent DNA conformations is lower than predicted by classical elasticity models such as the worm-like chain (WLC) model. For example, on short length scales, spontaneous large-angle bends are many times more prevalent than predicted by the WLC model. In this seminar we are going to test some of the recent ideas about mechanics of the DNA considering its topology and atomic characteristics.

زمان :شنبه ۸۸/۱/۲۲ ، ساعت : ۱۵:۳۰

مکان: آمفی تئاتر دانشکده فیزیک

قطب ماده چگال و سیستم‌های پیچیده