Abstract Submitted
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Fluctuations, structural transitions, and escape of confined biopolymers[1] AIQUN HUANG, ANIKET BHATTACHARYA, University of Central Florida — Conformation, dynamics, and escape of semi-flexible biopolymers confined in narrow-slits are studied using Langevin dynamics simulation in two dimensions (2D). Along with chain the length and the slit width, we vary the chain stiffness and study how internal modes of the individual chain segments are affected by chain stiffness. In addition to the usual measurements of gyration radii, end to end distance, persistence length, *etc.*, we plan to report a detailed analysis of the sub-chain conformations and relaxation of the confined biopolymers both in de Gennes and Odjik limit We also study escape of confined semi-flexible biopolymers through narrow slits.

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