

Abstract Submitted
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Translocation dynamics of a semi-flexible chain through a nano-pore¹ RAMESH ADHIKARI, ANDY W.C. LAU, Florida Atlantic University, ANIKET BHATTACHARYA, University of Central Florida — We study translocation dynamics of a semi-flexible chain through a nano-pore in two dimensions (2D) using Langevin dynamics simulation. Specifically, we show how the mean first passage time (MFPT) and the probability distribution of the MFPT are both influenced by the bending rigidity of the chain. Furthermore, we monitor the chain conformations both at the cis and the trans sides and relate these results with recent theories and experiments for a translocating chain through a nano-pore.

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