Abstract Submitted for the MAR08 Meeting of The American Physical Society

Linking number of linear chain in polymer solution and melts QI LIAO, Institute of Chemistry, Chinese Academy of Sciences, Beijing, 100080, China — We present the statistical results of linking number of linear chains prepared by Monte Carlo and molecular dynamics simulations of polymer solution and melts. Simulations were performed for a wide range of chain lengths covering both non-entangled and entangled polymer dynamics. The simulation results for linking number dependence on chain length and distribution function are compared with the prediction and conjecture of topology.

Qi Liao

Date submitted: 01 Dec 2007 Electronic form version 1.4