Accelerated dynamics of bead-spring polymer chains GOPINATH
SUBRAMANIAN, Univ of Southern Mississippi — We present results from the
application of the recently generalized parallel replica method to a system of bead-
spring polymer chains. The statistics of chain breakage show that individual chains,
after a relatively short dephasing time, display an exponential distribution of break-
age times over a wide range of extension ratios, thereby allowing us to exploit the
notion of the quasi-stationary distribution and accelerate the dynamical evolution
of a representative volume element.

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