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Simulation of dynamics of disordered diblock copolymers near the order-disorder transition PAVANI MEDAPURAM, DAVID MORSE, Univ of Minnesota - Twin Cities — We present a simulation study of the dynamics of composition fluctuations, chain conformations and stress for diblock copolymers near the order-disorder transition. Specifically, we study the behavior of the van Hove function S(q,t), which is a measure of structural relaxation, the linear response of the bond orientation tensor, which is closely related to optical birefringence, and the linear viscoelastic stress relaxation modulus G(t). We show how a slowly decaying mode associated with slow relaxation of composition fluctuations emerges as the degree of segregation is increased.

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