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On Fluctuations in Polymer Systems: Field Theoretic Simulations KIRILL KATSOV, Materials Research Lab, UCSB, ERIN LENNON, Chemical Engineering, UCSB, GLENN FREDRICKSON, Materials Research Lab, UCSB—We use variety of approaches to sample equilibrium fluctuations in polymersystems within a field theoretic framework. Comparison of (complex) Langevin and (smart) Monte Carlo sampling techniques is presented with special attention paid to their efficient implementation. We apply these methods to study effect of fluctuations on phase behavior in diblock copolymer melts and correlations in semidilute polymer solutions.

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