

Abstract Submitted
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Fluctuation effects in block copolymers ERIN M. LENNON,
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Barbara — Using recently developed techniques for locating phase transitions, we
study the effects of fluctuations in a field theoretic model on block copolymer be-
havior. Specifically, we couple the use of complex Langevin dynamics within a field
theoretic framework and thermodynamic integration techniques for the calculation
of free energies of fluctuating systems to show a revised prediction of the diblock
copolymer phase diagram. Further, these methods are extended into blend systems
to investigate unbinding transitions and critical micelle concentrations in cylindrical
phases.

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