

Abstract Submitted  
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**Influence of thermal fluctuations on nucleation in a diblock copolymer melt** RUSSELL SPENCER, ROBERT WICKHAM, University of Guelph — We study the effect of thermal fluctuations on the kinetics of nucleation of lamellar droplets from a metastable cylinder phase in a diblock copolymer melt by simulating the time-dependent Landau-Brazovskii model in three dimensions. We investigate the shift in the location of phase coexistence, due to fluctuations, as well as changes in nucleus shape, critical size and interfacial velocity. We also examine the kinetics of the transition in the spinodal regime.

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