

## ROLE OF NON-EQUILIBRIUM VACANCIES IN SPINODAL DECOMPOSITION

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### S u m m a r y

The standard Cahn–Hilliard model of spinodal decomposition has an essential fault, because it uses the approximation of equilibrium vacancies, which is valid only for processes with a characteristic length larger than the mean free path of vacancies. A procedure for the consideration of a non-equilibrium redistribution of vacancies at the spinodal decomposition and its influence on the decomposition kinetics is proposed. The hierarchy of characteristic times for the evolution of the morphology and the concentration is analyzed for a two-dimensional system.