

Computational study of spinodal decomposition in thin layers

The phenomenon of phase separation through spinodal decomposition is a process in which a mixture becomes unstable and spontaneously separates into two phases. The aim of this project is to improve the understanding of phase separation through spinodal decomposition in thin layers by using mathematical modeling and computer simulations, using experimental time-resolved results as input and validation for the output. The work will include a study of the relevant equations, most notably the Cahn-Hilliard equation coupled with Navier-Stokes equations, as well as lattice Boltzmann methods for the numerical solution of the equations.

[Further information](#)

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