

SEASEN Session 2 (Coagulation-Fragmentation Models) Speaker 1

Metastability for the stochastic Becker-Döring model

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We present a stochastic version of the classical Becker-Döring model, a well-known kinetic model for cluster formation that predicts the existence of a long-lived metastable state before a thermodynamically unfavorable nucleation occurs, leading to a phase transition phenomena. We show that the stochastic formulation leads to a precise and quantitative description of stochastic nucleation events.