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Wanner. *The Dynamics of Nucleation in Stochastic Cahn-Morral Systems.* Preliminary report.

Cahn-Hilliard systems serve as models for several phase separation phenomena in metal alloys. In this talk, I will talk about the dynamical aspects of a certain type of phase separation - known as nucleation - in which the material separates into small droplets. I will present numerical studies in the context of alloys consisting of three metallic components. The numerics give a statistical classification for the distribution of droplet types as the component structure of the alloy is varied. We relate these statistics to the low-energy equilibria of the deterministic equation computing numerical bifurcation methods. (Received February 12, 2010)