

Generalized Cahn-Hilliard equations for multicomponent alloys

Alain Miranville, Poitiers

M. Gurtin proposed several generalizations of the Cahn-Hilliard equation for binary alloys. His approach, based on the introduction of a new balance law for interactions at a microscopic level, allows in particular to take into account phenomena such as deformations and thermal effects. Our aim here is to show how one can generalize the theory to multicomponent alloys.

This is a joint work with G. Schimperna.