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Equilibrium for Multiphase Solids with Eulerian Interfaces

We describe a general phase-field model for hyperelastic multiphase materials. We can consider shape memory alloys as an example of such materials. The model features an elastic energy functional that depends on the phase-field variable and a surface energy term that depends in turn on the elastic deformation, as it measures interfaces in the deformed configuration. We prove existence of energy minimizing equilibrium states and Γ-convergence of diffuse-interface approximations to the sharp-interface limit.

It is a joint work with D. Grandi (Ferrara), E. Mainini (Genoa), and U. Stefanelli (Vienna).

Ort: Zoom video conference   Zeit: Donnerstag, 11.11.2021 um 14:30 Uhr

You are cordially invited to this lecture. Request the Zoom link from anja.schloemerkemper@mathematik.uni-wuerzburg.de

gez. Anja Schlömerkemper