Abstract: We study the homogenization of a non-local Navier–Stokes–Korteweg system in a periodic porous medium with Dirichlet boundary conditions. Models of the Navier–Stokes–Korteweg class are used to describe the isothermal dynamics of a fluid that can occur in two phases and allow for phase transitions. In the limit we obtain a non-local Cahn–Hilliard system.

Alle Interessenten sind herzlich eingeladen!