

Einladung zum Oberseminar Mathematik in den Naturwissenschaften

Julius-Maximilians-Universität Würzburg Lehrstuhl für Mathematik in den Naturwissenschaften

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On a Sixth-order Cahn-Hilliard Type Equation with Logarithmic Potential

We consider a class of six-order Cahn-Hilliard equations with logarithmic potential. The singularity of the configuration potential guarantees that the solution always stays in the physical relevant domain [-1,1]. On the other hand, the system is characterized by some highly singular diffusion terms that make the mathematical analysis more involved. We first prove the existence and uniqueness of global weak solutions. Besides, we investigate long-time behavior of the system by proving the existence of global attractor in a suitable complete metric space.

This is a joint work with Prof. G. Schimperna (University of Pavia, Italy).

Ort: Zoom video conference Zeit: Mittwoch, 05.05.2021 um 14:15 Uhr

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