

**A nonlocal version of the Abels-Garcke-Grün model:
new results in dimension two**

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We consider the diffuse interface model proposed by H. Abels, H. Garcke, and G. Grün in 2012. However, instead of assuming the usual free energy functional, we take a nonlocal version. The corresponding system was already analyzed by S. Frigeri in 2016 who established the existence of a global weak solution, in the case of constant mobility. In this talk, I intend to present some further results in dimension two which I have recently obtained jointly with C.G. Gal, A. Giorgini, and A. Poiatti.