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Minisymposium 9 - Nichtlineare Evolutionsgleichungen und Probleme mit freiem Rand

Sharp and diffuse interface models in phase transitions

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We report on recent advances in some sharp and diffuse interface models for phase transitions. In particular we study the Gamma-convergence of functionals arising in the Van der Waals-Cahn-Hilliard theory. The corresponding limit functional is given as the sum of the area and the Willmore functional. This problem was proposed as modification of a conjecture of De Giorgi.