Remarks on gradient theory of phase transitions in one dimension involving non-standard 2-well potential

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In this talk we investigate possibility of developing the gradient theory of phase transitions with general 2-well potential (i.e., 2-well potential with as fewer assumptions as possible). Based on Leoni's paper in 2014 we present regularity properties and compactness results related to finite-energy sequences for Cahn-Hilliard and Muller functionals in one dimension, therefore providing the groundwork for Gamma-convergence results for corresponding relaxed functionals as small parameter epsilon tends to zero.

References:

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