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Convergence to equilibrium for a parabolic-hyperbolic phase-field system with Neumann boundary conditions. (English) [Zbl 1120.35024](#)

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The paper is concerned with the asymptotic behavior of solutions to a parabolic-hyperbolic coupled system which describes the evolution of the relative temperature θ and the order parameter χ in a material subject to phase transitions. Neumann boundary condition for both θ and χ are assumed and the nonlinearities in the equation are assumed real analytic. Employing a suitable Simon-Lojasiewicz inequality the authors prove the convergence of global solutions to an equilibrium.

Reviewer: [Peter Poláčik \(Minneapolis\)](#)

MSC:

[35B40](#) Asymptotic behavior of solutions to PDEs
[80A22](#) Stefan problems, phase changes, etc.

Cited in **1** Review
Cited in **16** Documents

Keywords:

[Simon-Lojasiewicz inequality](#); [real analytic nonlinearities](#)

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