

ROBUST EXPONENTIAL ATTRACTORS FOR A FAMILY OF NONCONSERVED PHASE-FIELD SYSTEMS WITH MEMORY

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ABSTRACT. We consider a family of phase-field systems with memory effects in the temperature ϑ , depending on a parameter $\omega \geq 0$. Setting the problems in a suitable phase-space accounting for the past history of ϑ , we prove the existence of a family of exponential attractors \mathcal{E}_ω which is robust as $\omega \rightarrow 0$.

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