



Global Stability Properties for a Class of Dissipative Phenomena via One or Several Liapunov Functionals

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Abstract: We find some new results regarding the existence, uniqueness, boundedness, stability and attractivity of the solutions of a class of initial-boundary-value problems characterized by a quasi-linear third order equation which may have non-autonomous forcing terms. The class includes equations arising in superconductor theory, quantum mechanics and in the theory of viscoelastic materials.

Keywords: *Nonlinear higher order PDE; stability; boundedness; boundary value problems.*

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