Asymptotic stability of wave equations with a general internal feedback of diffusive type

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Abstract

We study well-posedness and asymptotic stability of some evolution problems under a general internal feedback of diffusive type. We prove that the system lacks exponential stability. Furthermore, we show an explicit and general decay rate result. The method is based on the frequency domain approach combined with multiplier technique.

[1] Stabilization of a Wave Equation with a General Internal Control of Diffusive Type, Discontinuity, Nonlinearity, and Complexity, To appear