Energy Decay of Solutions to the Cauchy Problem for Timoshenko Beam Systems with a Nonlinear Dissipative Term

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Abstract

In this paper, we consider a stabilisation the Cauchy problem for the Timoshenko beam systems with a nonlinear dissipative term in the whole space $\mathbb{R}$. Using the weighted energy method introduced by Todorova and Yordanov [6], we obtain the $L^1$ and $L^2$ decay rates of the solution.

Keywords: Energy decay, Timoshenko systems, nonlinear dissipative, Weighted energy method.

References