

Exponential decay for a nonlinear axially moving viscoelastic string
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Abstract

The stabilization of a nonlinear axially moving viscoelastic string is the topic of this paper. Next, we are showing Under reasonable conditions on the initial results, by using the prospective well process, certain solutions exist globally. We then demonstrate that the damping provided by the viscoelastic term is sufficient to ensure an exponential decay.

Key words: moving string, Arbitrary decay, multiplier method, Asymptotic behavior, Stability. Stability.

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