

Effect of the wave speeds on the decay rate of the thermoelastic structure in the whole line with interfacial slip

Veronica Poblete¹, Octavio Vera Villagran², and Aissa Guesmia³

¹Universidad de Chile Facultad de Ciencias

²Universidad del Bio-Bio

³Université de Lorraine

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Abstract

In this work we study the asymptotic behavior in the whole line of a thermoelastic structure with interfacial slip and second sound. We prove several polynomial decay estimates depending on the smoothness of initial data. The proof is based on the semigroup approach, the energy method by introducing a Lyapunov functional and Fourier transform.

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