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EXACT INTERNAL CONTROLLABILITY OF THE ELASTICITY SYSTEM

V. N. Domingos Cavalcanti, J. S. Prates Filho

Abstract. We study the exact internal controllability of the system:

$$\varphi'' - \mu\Delta\varphi - (\lambda+\mu)\nabla(\alpha(x) div\, \varphi) = h \quad \text{in} \quad \Omega\times]0,T[,$$

where Ω is a bounded domain in R^n, λ and μ are the Lamè's constants, and α is a positive real function defined in $\overline{\Omega}$. The result is obtained by applying HUM, Hilbert Uniqueness Method, due to J. L. Lions.

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Departamento de Matemática - Universidade Estadual de Maringá 87020-900 Maringá - PR, Brazil

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