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Stability of wave equation under a fractional dynamic control of diffusive type

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Abstract

In this presentation, a wave equation with dynamic control and fractional term on the boundary is considered. The main approaches to the description of strong stability are Arendt and Batty's theorems. Special attention is paid to the polynomial decay rate, this formalism is based on the methods of the qualitative theory of differential equations. In the last step we show the non uniformly stability in the unit square of the plane.

Mathematics Subject Classification: 93D15, 35B40, 47D03, 74D05.
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