

# Global existence and decay estimates for the viscoelastic kirchhoff equation with a delay term

Abdelhamid Mohemmed Djaouti<sup>1</sup>, noureddine Sebih<sup>2</sup>, and Chafi Boudkhil<sup>2</sup>

<sup>1</sup>King Faisal University

<sup>2</sup>University of Djillali Liabes Sidi Bel Abbes

May 5, 2020

## Abstract

In this paper, we consider a viscoelastic kirchhoff equation with a delay term in the internal feedback. By using the Faedo-Galerkin approximation method we prove the well-posedness of the global solutions. Introducing suitable energy, we prove the general uniform decay results

## Hosted file

wileyNJD-AMA.pdf available at <https://authorea.com/users/299571/articles/429027-global-existence-and-decay-estimates-for-the-viscoelastic-kirchhoff-equation-with-a-delay-term>