Exponential stabilization of wave equation with acoustic boundary conditions and its application to memory type boundary

Dandan Guo¹ and ZHIFEI ZHANG²

May 5, 2020

Abstract

In this paper, we deal with the wave equation with acoustic boundary conditions. The exponential stabilization is obtained by Lyapunov approach and Riemannian geometry method. We then apply our main theorem to the wave equations with memory type acoustic boundary conditions, which is not available in the literature and give an example in the end.

Hosted file

 ${\it 1.pdf} a vailable at https://authorea.com/users/292937/articles/420775-exponential-stabilization-of-wave-equation-with-acoustic-boundary-conditions-and-its-application-to-memory-type-boundary$

¹Huazhong University of Science and Technology

²Huazhong University of Science and Technology - Main Campus