Cornilleau, Pierre; **Nicaise, Serge**

Energy decay for solutions of the wave equation with general memory boundary conditions. (English) Zbl 1240.35328

Differ. Integral Equ. 22, No. 11-12, 1173-1192 (2009).

From the authors's abstact: "We consider the wave equation in a smooth domain subject to Dirichlet boundary conditions on one part of the boundary and dissipative boundary conditions of memory-delay type on the remainder of the boundary, where a general Borel measure is involved. Under quite weak assumptions on this measure, using the multiplier method and a standard integral inequality, we show the exponential stability of the system."

Reviewer: Milan Štědrý (Praha)

MSC:

35L20 Initial-boundary value problems for second-order hyperbolic equations
35L05 Wave equation
35B40 Asymptotic behavior of solutions to PDEs

Keywords:

wave equation; dissipative boundary conditions of memory-delay type; exponential stability

Full Text: arXiv