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*Stabilization for the wave equation without geometric control*

We consider the damped wave equation $(\Delta_g - \partial_t^2 - 2a\partial_t)u = 0$ on a compact, negatively curved manifold $(M, g)$ of dimension $d > 1$ with a damping term $a \in C^\infty(M)$ positive and non-identically zero. In this situation, the energy decays to zero as time goes to infinity : the goal of the stabilization problem is to determine the speed of this decay. Under an hypothesis involving the negativity of a topological pressure, we obtain a spectral gap near the real axis, and an exponential decay of the energy for all initial data sufficiently regular. In particular, this result can hold in cases where the geometric control condition fails.