

# Exponential decay for semilinear damped wave equations with delay feedback

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We analyze a class of semilinear damped wave-type equations with a delay feedback with time-variable coefficient. By combining semigroup arguments, careful energy estimates, and an iterative approach we are able to prove, under suitable assumptions, a well-posedness result and an exponential decay estimate for solutions corresponding to small initial data.

**MSC 2010:** 93D15, 35L90, 5B35

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