



**THE GLOBAL WELL-POSEDNESS OF SOLUTIONS FOR A
KIRCHHOFF-TYPE WAVE EQUATIONS WITH
LOGARITHMIC NONLINEARITY**

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Abstract

In this paper, we investigate the global well-posedness of solutions for a class of semilinear Kirchhoff-type wave equations with logarithmic nonlinearity. We not only discuss global existence of solutions with initial data in the potential well, but also prove that blow-up in finite time occurs in an unstable set. Besides, the longtime behavior of solution is also constructed.

Keywords and phrases: Kirchhoff-type equations, logarithmic, initial boundary problem, blow up.

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