

THE GLOBAL ATTRACTORS FOR THE HIGHER-ORDER NONLINEAR KIRCHHOFF-TYPE EQUATION WITH NONLINEAR DAMPED TERMS*

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ABSTRACT

In this paper ,we study the long time behavior of solution to the initial boundary value problems for higher -order kirchhoff-type equation with nonlinear strongly dissipation:

$$u_{tt} + (-\Delta)^m u_t + \phi(\|\nabla^m u\|^2)(-\Delta)^m u + h(u_t) = f(x).$$

At first ,we prove the existence and uniqueness of the solution by priori estimate and Galerkin method then, then, we establish the existence of global attractors.

Keywords: Higher-order nonlinear Kirchhoff wave equation; The existence and uniqueness; The Global attractors.

2010 Mathematics Classification: 35B41, 35G31