

## THE GLOBAL ATTRACTOR FOR THE KIRCHHOFF-TYPE EQUATIONS WITH STRONGLY DAMPED TERMS AND SOURCE TERMS

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### ABSTRACT

The paper studies the initial boundary value problem for a class of the Kirchhoff-type equations with strongly damped terms and source terms in bounded domain. Under suitable assumptions, some priori estimates are acquired. In addition, the existence and uniqueness of the solutions are got by the Galerkin's method. Furthermore, the existence of the global attractor in  $H_0^1(\Omega) \times H_0^m(\Omega) \times L^2(\Omega) \times L^2(\Omega)$  is obtained.

**Keywords:** Kirchhoff-type equations; Galerkin's method; The global attractor; Existence; Uniqueness

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