



**EXISTENCE OF POSITIVE PERIODIC SOLUTIONS FOR A
SECOND-ORDER DIFFERENTIAL EQUATION
WITH INDEFINITE WEIGHT**

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Abstract

In this paper, we will study the existence of positive solutions for the periodic boundary value problem

$$\begin{cases} u'' + a(t)u = \lambda h(t) f(u), \\ u(0) = u(T), \quad u'(0) = u'(T) \end{cases}$$

with sign-changing Green's function and indefinite weight. The method used here is the Schauder fixed point theorem..

Keywords and phrases: periodic boundary value problem, positive solution, fixed point theorem.

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