




## 一类二阶非自治Hamilton系统的周期解

(吉首大学数学与计算机科学学院, 湖南 吉首 416000)

### Periodic Solution of Some Non-Autonomous Second Order Hamiltonian Systems

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**摘要** 在线性增长和次线性增长条件下, 利用临界点理论中的极小作用原理和鞍点定理, 研究了二阶非自治Hamilton系统周期解的存在性问题, 获得了一些新的可解性条件.

**关键词:** 二阶非自治Hamilton系统 极小作用原理 鞍点定理 次线性增长 线性增长 周期解

**Abstract:** By making use of the least action principle and the saddle point theorem in critical point theory. The existence of periodic solutions is studied for some non-autonomous second order Hamiltonian systems in the cases of and linear growth the sublinear growth. Some new solvability conditions are obtained.

**Key words:** non-autonomous second order Hamiltonian systems the least action principle saddle point theorem sublinear growth linear growth periodic solutions

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