

论文

NON-EXISTENCE OF SINGULAR CYCLES IN AQUADRIC DIFFERENTIAL SYSTEM WITH FINE FOCUS OF ORDER THREE

LU Gang, LIANG Zhaojun

Department of Mathematics, Huazhong Normal University, Wuhan 430070, China

收稿日期 修回日期 网络版发布日期 接受日期

摘要 The problem of existence or non-existence of singular cycles (or komoclinic loops and heteroclinic cycles as being termed in the modern literature of nonlinear dynamical systems) is one of the most important subjects in the study of quadratic differential systems. In this paper we prove that there exist no singular cycles either connecting finite singular points or connecting singular points at infinity for a quadratic differential system with fine focus of order three.

关键词 [Homodinic, heteroclinic, centre-focus cr](#)

分类号

NON-EXISTENCE OF SINGULAR CYCLES IN AQUADRIC DIFFERENTIAL SYSTEM WITH FINE FOCUS OF ORDER THREE

LU Gang, LIANG Zhaojun

Department of Mathematics, Huazhong Normal University, Wuhan 430070, China

Abstract The problem of existence or non-existence of singular cycles (or komoclinic loops and heteroclinic cycles as being termed in the modern literature of nonlinear dynamical systems) is one of the most important subjects in the study of quadratic differential systems. In this paper we prove that there exist no singular cycles either connecting finite singular points or connecting singular points at infinity for a quadratic differential system with fine focus of order three.

Key words [Homodinic](#) [heteroclinic](#) [centre-focus criterion](#) [singular cycles](#)

DOI:

通讯作者

扩展功能

本文信息

- ▶ [Supporting info](#)
- ▶ [PDF\(0KB\)](#)
- ▶ [\[HTML全文\]\(0KB\)](#)
- ▶ [参考文献](#)

服务与反馈

- ▶ [把本文推荐给朋友](#)
- ▶ [加入我的书架](#)
- ▶ [加入引用管理器](#)
- ▶ [复制索引](#)
- ▶ [Email Alert](#)
- ▶ [文章反馈](#)
- ▶ [浏览反馈信息](#)

相关信息

- ▶ 本刊中 包含 "[Homodinic, heteroclinic, centre-focus cr](#)" 的相关文章
- ▶ 本文作者相关文章
 - [LU Gang](#)
 - [LIANG Zhaojun](#)