论文

# DYNAMICAL BEHAVIORS OF A FOUR-DIMENSIONAL SYSTEM IN INFECTIOUS DISEASE

LIN Yiping (1), JING Zhujun (2)

(1)Yunnan Institute of Applied Mathematics, Kunming Institute of Technology, Kunming 650093, China; (2)Institute of Mathematics, Academia Sinica, Beijing 100080, China

收稿日期 修回日期 网络版发布日期 接受日期

摘要 In this paper a mathematical model of a four-dimensional system in infectious disease with 16 parameters is investigated, the bifUrcation of equilibria depending on one parameter is given, and the conditions of local stability of equilibria and the existence of Hopf bifurcation are studied.

关键词 <u>Equilibria bifUrcation</u>, <u>Hopf bifurcation</u> 分类号

## DYNAMICAL BEHAVIORS OF A FOUR-DIMENSIONAL SYSTEM IN INFECTIOUS DISEASE

LIN Yiping(1),JING Zhujun(2)

(1)Yunnan Institute of Applied Mathematics, Kunming Institute of Technology, Kunming 650093, China; (2)Institute of Mathematics, Academia Sinica, Beijing 100080, China

**Abstract** In this paper a mathematical model of a four-dimensional system in infectious disease with 16 parameters is investigated, the bifUrcation of equilibria depending on one parameter is given, and the conditions of local stability of equilibria and the existence of Hopf bifurcation are studied.

Key words Equilibria bifUrcation Hopf bifurcation four-dimensional infectious disease System

DOI:

通讯作者

#### 扩展功能

#### 本文信息

- ▶ Supporting info
- ▶ <u>PDF</u>(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

▶ <u>本刊中 包含 "Equilibria bifUrcation,</u> Hopf bifurcation"的 相关文章

#### ▶本文作者相关文章

- LIN Yiping
- JING Zhujun