论文

A NONLINEAR POPULATION EVOLUTION SYSTEM

Yu Jingyuan(1), Yuan Jianhua(1), Zhu Guangtian(2)

(1)Beijing Institute of Information and Control,Beijing,China;(2)Institute of Systems Science,Academia Sinica,Beijing,China

收稿日期 修回日期 网络版发布日期 接受日期

摘要 A nonlinear age-dependent population model, which allows for consideration of the effects of crowding and resource limitation, is presented. The basic properties of solution, such as existence, positivity, uniqueness, and ultimate behavior, are discussed. Also, the condition of stability and controll-ability of the nonlinear population system is obtained.

关键词 <u>semigroup, existence of solution, stabil</u> 分类号

A NONLINEAR POPULATION EVOLUTION SYSTEM

Yu Jingyuan(1), Yuan Jianhua(1), Zhu Guangtian(1)

(1)Beijing Institute of Information and Control,Beijing,China;(2)Institute of Systems Science,Academia Sinica,Beijing,China

Abstract A nonlinear age-dependent population model, which allows for consideration of the effects of crowding and resource limitation, is presented. The basic properties of solution, such as existence, positivity, uniqueness, and ultimate behavior, are discussed. Also, the condition of stability and controll-ability of the nonlinear population system is obtained.

Key words semigroup existence of solution stability

DOI:

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
- ▶<u>文章反馈</u>
- ▶ 浏览反馈信息

相关信息

▶ <u>本刊中 包含 "semigroup</u>, existence of solution, stabil"的 相关文章

▶本文作者相关文章

- Yu Jingyuan
- · Yuan Jianhua
- · Zhu Guangtian

通讯作者