### 向量优化问题有效解的稳定性

胡明(1), 向淑文(2)

(1)江苏科技大学数理学院, 镇江 212003; (2)贵州大学理学院, 贵阳 550025

收稿日期 2006-3-27 修回日期 2007-4-4 网络版发布日期 2008-7-8 接受日期

摘要 运用标量化的方法,

通过锥正定真有效解的上半连续性讨论了无限维赋范空间中锥有效解的部分上半连续性,证明了锥有效解的通有稳定性.在此基础上,进一步证明,在Baire纲的意义下,绝大多数的向量优化问题至少存在一个锥正定真有效解是本质的有效解,换句话说,绝大多数的向量优化问题锥有效解是几乎下半连续的.

关键词 向量优化,锥正定真有效解,有效解,上半连续性,通有稳定性.

分类号 49K10, 90C29

# The Stability of the Efficient Solutions for Optimization Problems

HU Ming(1), XIANG Shuwen(2)

(1)School of Mathematics and Physics, Jiangsu University of Science and Technology, Zhenjiang 212003; (2)School of Science, Guizhou University, Guiyang 550025

**Abstract** In terms of the method of scalar assignment, the partly upper semicontinuity of cone efficient solution in infinite dimensional normed spaces is investigated by using the upper semicontinuity of cone positive proper efficient solution, and the generic stability of cone efficient solution is proved. Then, in the sense of Baire catalogue, it is shown that for almost all optimization problems, there exists at least one cone positive proper efficient solution that is essential efficient solution. That is to say, for almost all optimization problems, a cone efficient solution is a.l.s.c..

**Key words** <u>Vector optimization</u> <u>cone positive proper efficient solution</u> <u>efficient solution</u> <u>upper semicontinuity</u> <u>generic stability.</u>

DOI:

# 通讯作者

## 扩展功能

#### 本文信息

- ▶ Supporting info
- ▶ **PDF**(323KB)
- **▶[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
- ▶<u>复制索引</u>
- ► Email Alert

### 相关信息

- ▶ 本刊中 包含"向量优化, 维正定真有效解,有效解,上半连续性, 通有稳定性."的 相关文章
- ▶本文作者相关文章
- 胡明
- 向淑文