

论文

## 向量映射的鞍点和Lagrange对偶问题

黄龙光(1), 刘三阳(2)

(1)集美大学理学院, 厦门361021;(2)西安电子科技大学应用数学系, 西安 710071

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摘要 本文研究拓扑向量空间广义锥-次类凸映射向量优化问题的

鞍点最优性条件和Lagrange对偶问题,建立向量优化问题的

Fritz John鞍点和Kuhn-Tucker鞍点的最优性条件及其与向量优化问题

的有效解和弱有效解之间的联系. 通过对偶问题和向量优化问题

的标量化刻画各解之间的关系, 给出目标映射是广义锥-次类凸的向量

优化问题在其约束映射满足广义Slater约束规格的条件下的对偶定理.

关键词 [广义锥-次类凸](#) [有效解](#) [弱有效解](#) [鞍点](#)

分类号

## SADDLE POINTS AND LAGRANGIAN DUAL PROBLEMS OF VECTOR MAPPING

Huang Longguang(1),(2)

(1)School of Science, Jimei University, Xiamen 361021;(2)Department of Applied Mathematics, Xidian University, Xi'an 710071

**Abstract** The saddle point optimality conditions and Lagrangian dual problems of vector optimization for generalized cone subconvex-like mapping in a topological vector space are studied. The optimality conditions of Fritz John's and Kuhn-Tucker's saddle points, and their relations to the efficient solutions and weak efficient solutions are presented. The properties of solutions are characterized with the Lagrangian dual problems and scalarization of vector optimization problems. The dual theorems on vector optimization problems, in which the objective mapping is generalized cone subconvex-like, and in which the constraint mapping satisfies generalized Slater constraint qualifications, are given.

**Key words** [Generalized cone subconvex-like](#) [efficient solution](#) [weak efficient solution](#) [saddle point](#) [general](#)

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