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多面体集下多目标优化问题近似解的若干性质

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Some properties of approximate solutions for multiobjective optimization problems with respect to polyhedral set

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摘要 研究了多目标优化问题的近似解. 首先证明了多面体集是 co-radiant集, 并证明了一些性质. 随后研究了多面体集下多目标优化问题近似解的特殊性质.

关键词: [多目标优化](#) [多面体集](#) [近似解](#)

Abstract: In this paper, we consider approximate solutions for multiobjective optimization problems. First, we prove polyhedral set is co-radiant set, and present some properties for this special co-radiant set. And then, we present some properties for approximate solutions with respect to polyhedral set.

Keywords:

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- [1] Kutateladze S S. Convex ϵ -programming [J]. Soviet Math Dokl, 1979, 20: 391-393.
- [2] White D J. Epsilon efficiency [J]. J Optim Theory Appl, 1986, 49: 319-337. 
- [3] Helbig S. On a new concept for ϵ -efficiency [R]. Talk at Optimization Days, 1992.
- [4] Tanaka. {A new approach to approximation of solutions in vector optimization problems [C]//Proceedings of APORS, Singapore: World Scientific, 1995.
- [5] Gutierrez C, Jimenez B, Novo V. A set-valued Ekeland's variational principle in vector optimization [J]. SIAM J Control Optim, 2008, 47: 883-903. 
- [6] Gutierrez C, Jimenez B, Novo V. Generalized ϵ -quasi-solutions in multiobjective optimization problems: Existence results and optimality conditions [J]. Nonlinear Anal, 2010, 72: 4331-4346. 
- [7] Gutierrez C, Jimenez B, Novo V. A unified approach and optimality conditions for approximate solutions of vector optimization problems [J].

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- [8] Gutierrez C, Jimenez B, Novo V. On approximate efficiency in multiobjective programming [J]. Math Methods Oper Res, 2006, 64: 165-185. 
- [9] Gutierrez C, Jimenez B, Novo V. Optimality conditions via scalarization for a new ϵ -efficiency concept in vector optimization problems [J]. European J Oper Res, 2010, 201: 11-22. 
- [10] Engau A, Wiecek M M. Cone characterizations of approximate solutions in real vector optimization [J]. J Optim Theory Appl, 2007, 134: 499-513. 
- [11] Gao Y, Yang X M, Teo K L. Optimality conditions for approximate solutions of vector optimization problems [J]. J Industrial Appli, 2011, 7: 483-496.
- [12] Gao Y, Hou S H, Yang X M. Existence and optimality conditions for approximate solutions to vector optimization problems [J]. J Optim Theory Appl, 2012, 152: 97-120. 
- [13] Gutierrez C, Huerga L, Novo V. Scalarization and saddle points of approximate proper solutions in nearly subconvexlike vector optimization problems [J]. Journal of Mathematical Analysis and Applications, 2012, 389: 367-383. 
- [1] 赵克全 杨新民.一类多目标优化问题的有效性[J]. 运筹学学报, 2011,15(3): 1-8