Second-ordered Wolfe type and Mond-Weir type duality models for the complex multi-objective fractional programming

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Abstract

We consider a complex multi-objective fractional programming problem(CMFP). Duality problem is an important role on optimization theory. The goal of this paper is to formulate some second-ordered free type dual problems. We aim to establish the second-ordered Wolfe type and second-ordered Mond-Weir type duality problems of (CMFP), and then prove that the duality theorems: the weak, strong and strictly converse duality theorem.

Key words: multi-objective fractional programming, generalized convexity, duality theorems

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