

Abstract

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PARAMETRIC STUDY ON PARETO, NASH MINMAX DIFFERENTIAL GAME

In parametric analysis, which often refers to parametric optimization parametric programming, a perturbation parameter is introduced to the optimization problem, which means that the coefficients in the objective function of the problem and on the other hand of the constraints are perturbed. In this paper, we present the qualitative and quantitative analysis of an adapted approach of Min-Max differential game of fixed duration with general parameters in the cost functions and constraints between multiple players playing dependently (the Pareto concept) and others independently (the Nash concept), the solvability set and the stability sets of the first and the second kind are defined and algorithms for determining these sets are presented.