

A Comparison of Metaheuristics for the Problem of Solving Parametric Interval Linear Systems

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The problem of computing a hull solution of parametric interval linear systems is considered. This problem can be reduced to the problem of solving a family of constrained optimization problems. A naive evolutionary strategy turn out to be a very useful tool for computing the hull solution. However, for larger problems it seems to be not efficient enough. It requires a large number of individuals and generations to give reasonable results. In this study other metaheuristics are considered to get more efficient method for solving parametric interval linear system with both linear and nonlinear dependencies.