

"A SEQUENTIAL PENALTY ALGORITHM FOR SOLVING
NONLINEAR GOAL PROGRAMS"

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ABSTRACT

In this paper, a sequential penalty algorithm is presented for solving the nonlinear goal programs.

This algorithm is constructed on determining the optimal sequential solutions of the sequential subprograms of the nonlinear goal program, where, the convergence to local point for each subprogram is accomplished by combining penalty and pattern search methods.

Finally, three numerical examples are presented to compare the obtained results by using the above algorithm and Ignizio algorithms (modified pattern search and modified Griffith and Stewart) and El-Dash algorithm (Double condensed geometric programming).