



**SOLVING UNCONSTRAINED QUADRATIC OPTIMIZATION
PROBLEMS WITH BINARIES VARIABLES: ALIENOR
METHOD VERSUS CLIQUES-EDGES
LINEARIZATION**

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Abstract

In this paper, we are interested in the new global optimization method called Alienor method coupled with Optimization Preserving Operators* (OPO*) and the linearization techniques for resolution of the Unconstrained Quadratic (0-1) Problem. The aim of this paper is to compare Alienor method coupled with Optimization Preserving Operators* (OPO*) with cliques-edges linearization by solving a quadratic problem. The results show that Alienor method coupled with OPO* is more efficient than clique-edge linearization. The results given by Alienor method are also very close to the exact minimum.

Keywords and phrases: global optimization, Alienor method, O.P.O*, linearization technique.

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