

Global Optimization: The Alienor Method Mixed with Piyavskii-Shubert Technique

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Abstract : In this paper, we study a coupling of the Alienor method with the algorithm of Piyavskii-Shubert. The classical multidimensional global optimization methods involves great difficulties for their implementation to high dimensions. The Alienor method allows to transform a multivariable function into a function of a single variable for which it is possible to use efficient and rapid method for calculating the the global optimum. This simplification is based on the using of a reducing transformation called Alienor.

Keywords : global optimization, reducing transformation, α -dense curves, Alienor method, Piyavskii-Shubert algorithm

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