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## OPTIMIZATION OF THE BEHAVIOR OF BUCKLINGOF THE STRATIFIEES BY GENETIC ALGORITHM

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**Abstract :** The laminated composite structures which are largely usednowadays, become unstable when they are prone to loadings ofmechanical or thermal nature and flame in the elastic zone.Consequently, buckling has a very great importance whendesigning this kind of structure. In this work, we studied thephenomenon of the buckling which was devoted underinvestigation of the optimization of a composite materiallaminated by the use of a data-processing method based on amathematical theory which uses the stochastic statistics it is thetheory of the genetic algorithms (GA). The objective of this workis, the maximization of the rigidity of the plate laminated bymaximizing the critical load of buckling according to theorientations of the folds.

Keywords : Composite laminated, optimization, Buckling, genetic Algorithm.