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On certain coloring parameters of Mycielski graphs of some graphs

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Coloring the vertices of a graph G according to certain conditions can be considered as a random experiment and a discrete random variable X can be defined as the number of vertices having a particular color in the proper coloring of G. The concepts of mean and variance, two important statistical measures, have also been introduced to the theory of graph coloring and determined the values of these parameters for a number of standard graphs. In this paper, we discuss the coloring parameters of the Mycielskian of certain standard graphs.

Keywords: Graph coloring; χ-chromatic mean; χ-chromatic variance; χ^+-chromatic mean; χ^+-chromatic variance.