

Majority colorings of graphs and digraphs - new results and possible applications

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A majority coloring of a graph (or digraph) is a coloring in which at least half of the neighbors (respectively out-neighbors) of each vertex v obtain a different color than v . Generalized variants of the problem can include fractions other than $1/2$, weighted edges, or even online coloring. The talk will present the selected results on various variants of majority coloring. We will also show possible applications of majority coloring to real-life problems, in particular to a variant of the Conference Scheduling Problem.

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