Edge-coloring of graphs and multigraphs

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Abstract

We survey some beautiful theorems and conjectures in edge-coloring, focusing on graph classes where an obvious lower bound on the edge chromatic number holds with equality. One of these problems leads us to Tashkinov trees, which are a powerful recoloring tool for edge-coloring multigraphs.

Keywords: graph, multi-graph, vertex-coloring, edge-coloring.