

Relaxed coloring of planar graphs

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A graph G is (c_1, c_2, \dots, c_k) -colorable if the vertex set of G can be partitioned into k sets V_1, V_2, \dots, V_k such that for every $i \in \{1, 2, \dots, k\}$ the induced subgraph $G[V_i]$ has maximum degree at most c_i . For example, a $(0, 0, 0)$ -colorable graph is properly 3-colorable. In this talk, we will give a brief survey on the recent progress towards the Steinberg Conjecture, (strong) Bordeaux Conjecture and related problems in terms of relaxed coloring.

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