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On $(4, 1)^$ -choosability of toroidal graphs without chordal 7-cycles and adjacent 4-cycles*

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Abstract: A graph G is called $(k, d)^*$ -choosable if for every list assignment L satisfying $|L(v)| = k$ for all $v \in V(G)$, there is an L -coloring of G such that each vertex of G has at most d neighbors colored with the same color as itself. In this paper, it is proved that every toroidal graph without chordal 7-cycles and adjacent 4-cycles is $(4, 1)^*$ -choosable.

Keywords: toroidal graph; defective choosability; chord

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