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On the chromatic index of almost all graphs. (In English)

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To say that “almost all graphs have a given property” means that if $P(n)$ is the probability that a random graph on n vertices has that property, then $P(n) \rightarrow 1$ as $n \rightarrow \infty$. It is known that the chromatic index of a simple graph G is either ρ or $\rho + 1$ where ρ is the maximum vertex-degree of G (Vizing’s theorem). The second author conjectured that almost all graphs have the chromatic index equal to ρ . The purpose of this paper is to prove the conjecture. The result is deduced from the lemma that almost all graphs have a unique vertex of maximum degree.

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Classification:

05C15 Chromatic theory of graphs and maps