

Triangle-tilings in graphs without large independent sets

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We study the minimum degree necessary to guarantee the existence of perfect and almost-perfect triangle-tilings in an n -vertex graph G with sublinear independence number. In this setting, we show that if $\delta(G) \geq n/3 + o(n)$ then G has a triangle-tiling covering all but at most four vertices. Also, for every $r \geq 5$, we asymptotically determine the minimum degree threshold for a perfect triangle-tiling under the additional assumptions that G is K_r -free and n is divisible by 3.