Stephen G Hartke* (stephen.hartke@ucdenver.edu) and Luke Nelsen. Subcubic planar graphs are 7-square-choosable.

The square of a graph $G$ is the graph with vertex set $V(G)$ where two vertices are adjacent if their distance in $G$ is at most 2. Wegner (1977) conjectured that the square of any subcubic planar graph is 7-colorable, which was proved independently by Thomassen (2018) and Hartke, Jahanbekam, and Thomas (2019+). Cranston and Kim (2008) asked whether the list chromatic number of the square of any subcubic planar graph is also at most 7. We answer this question in the affirmative, proving that all subcubic planar graphs are 7-square-choosable.

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