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Stephen G. Hartke* (stephen.hartke@ucdenver.edu), Dept. of Math. and Stat. Sciences,
University of Colorado Denver. *Coloring the square of subcubic planar graphs.*

Given a graph G , the square of G is the graph formed from G by adding edges between vertices that are distance at most two apart. A graph is subcubic if the maximum degree is at most 3. In 1977, Wegner showed that the square of a subcubic planar graph can be properly colored with at most 8 colors and conjectured that 7 colors suffice. We prove this conjecture using discharging and computation for the reducible configurations.

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