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## Equivariant colorings of random planar graphs

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Consider some locally finite random planar graph in the plane, whose distribution is invariant under isometries. We would like to find a coloring rule that is a non-randomized, equivariant function of the graph. It has been shown that 6 colors suffice for the Voronoi tessellation on a Poisson point process (Angel, Benjamini, Gurel–Gurevich, Meyerovitch and Peled). We present a coloring rule which colors any random planar graph that almost surely has only the trivial symmetry, using 5 colors. Some related questions are also discussed.