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A note on the existence of plane spanning trees of geometric graphs. (English) Zbl 0956.05030

Akiyama, Jin (ed.) et al., Discrete and computational geometry. Japanese conference, JCDCG '98. Tokyo, Japan, December 9-12, 1998. Proceedings. Berlin: Springer. Lect. Notes Comput. Sci. 1763, 274-277 (2000).

Let P be a set of points in the plane. Every edge of a geometric graph $G = (P, E)$ with point set P is a straight line with endpoints in P. A plane spanning tree of G is a subtree of G that includes every vertex and has no edges whose lines cross in the plane. It is shown that every geometric graph G with at least 5 vertices has a plane spanning tree, when every induced subgraph of G with at least 5 vertices has a plane spanning tree.

For the entire collection see [Zbl 0933.00046].

Reviewer: Hans L.Bodlaender (Utrecht)

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