# Planar graphs and intersection graphs of segments 

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#### Abstract

Given a set $S$ of segments in the plane, the intersection graph of $S$ is the graph with vertex set $S$ in which two vertices are adjacent if and only if the corresponding two segments intersect. We prove that every planar graph is the intersection graph of some segments in the plane. This proves a conjecture of Scheinerman (PhD Thesis, 1984).


