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ON THE SEGMENT NUMBER OF A PLANAR GRAPH

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The line cover number of a planar graph G is the minimum number of lines that support all the edges of a plane straight-line drawing of G . The segment number of G is the minimum number of connected straight-line segments that are formed by a plane straight-line drawing of G . We prove that the segment number is in FPT when parameterized by several standard invariants of the input graph. We find of particular interest that even the list-segment version of the problem remains Fixed Parameter Tractable.

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