

## **Coloring Intersection Points of Line Segments**

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We study the minimum number of colors with which the intersection points of a set of line segments can be colored so that no segment contains points with the same color. This problem can also be seen as an optimization variant of the Erdős-Faber-Lovász Conjecture constrained to line segments instead of arbitrary curves. We discuss some complexity results and give optimal colorings for several families of segments.

Keywords: line segment, intersection point, Erdős-Faber-Lovász Conjecture