



# The Carpenter's Rule Problem

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Abstract: Is it possible to take any given polygon and move it through space to a convex polygon, while never having the polygon intersect itself? If you drop a necklace on a flat table and attempt to do this yourself, you'll probably be able to successfully do this. This is far from a mathematical proof, however, and this problem, known as the Carpenter's Rule Problem, remained open for decades until it was solved in the early 90s. In this talk, I'll introduce the Carpenter's rule problem and explain a surprising approach for how to solve it that involves an important technique in optimization known as linear programming.

Most of this talk should be approachable for anyone who enjoys looking at pictures and has taken a calculus course.

- February 29th
- 2:40pm
- Fisher Science Building
- Room 112

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