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Title: Flows of polygons, graphs, and curves.

Abstract: There are various reasons one might consider flows of polygons, graphs, and curves, for instance for modeling grain growth, finding short paths, modeling bubbles, proving isoperimetric inequalities. We will survey some of these ideas starting with basics of linear polygon flows which can be completely analyzed using Fourier analysis and basic theorems of Gage-Hamilton-Grayson on the curve shortening flow.