Lily Du, Stefanie Wang and Yonit Bousany*, Department of Mathematics and Statistics, Smith College, Northampton, MA 01063. Experiments in monotone kinetic visibility. Preliminary report.

Given a simple planar polygon, is it possible to move its vertices in such a way that the internal visibility graph increases monotonically? Mathematica experiments lead to possible approaches for answering this question, some of which can be proven to work for special subclasses. (Received September 19, 2010)