## Abstract Submitted for the MAR15 Meeting of The American Physical Society

Mulitshape Origami Metasheets SCOTT WAITUKAITIS, MARTIN VAN HECKE, Leiden University — We show how origami-based folding structures are a platform for multistable metamaterials. Our focus is the simplest building block, rigid 4-vertices, which we demonstrate can have up to six stable states. We extend our results to non-Euclidean vertices, which enables us fine-control over the number of minima. Our results lay the foundation for building designer, origami-based shape-shifting structures.

Scott Waitukaitis Leiden University

Date submitted: 03 Nov 2014 Electronic form version 1.4