## Algorithmic lattice kirigami

Daniel Sussman, University of Pennsylvania

We use a regular arrangement of kirigami elements to demonstrate an inverse design paradigm for folding a flat surface into complex target configurations. We show that a single fixed lattice of cuts permits a wide variety of target surfaces to be programmed into the sheet by varying the folding directions, and we explore the space of target structures that can be reached from a given structure without first unfolding the sheet.