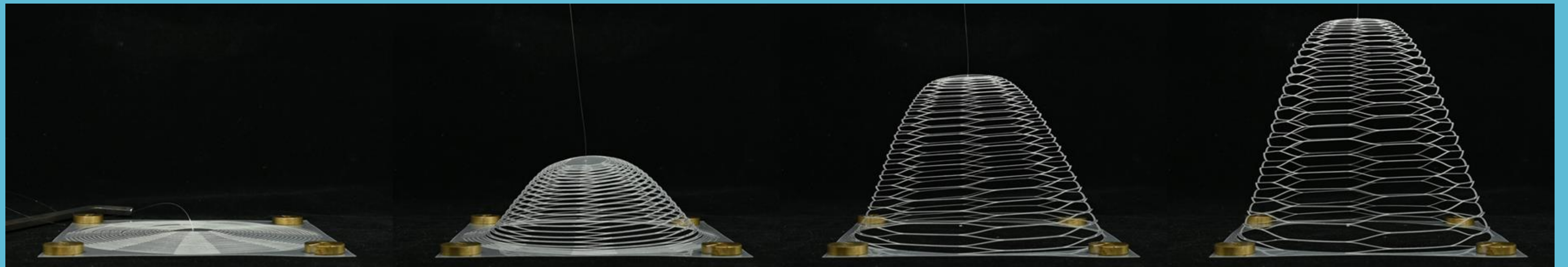


# DEPLOYING COMPLEX SHAPES USING KIRIGAMI

Joo-Won HONG<sup>1</sup>, Marie TANI<sup>2</sup>, José BICO<sup>1</sup>, Étienne REYSSAT<sup>1</sup>, Benoît ROMAN<sup>1</sup>

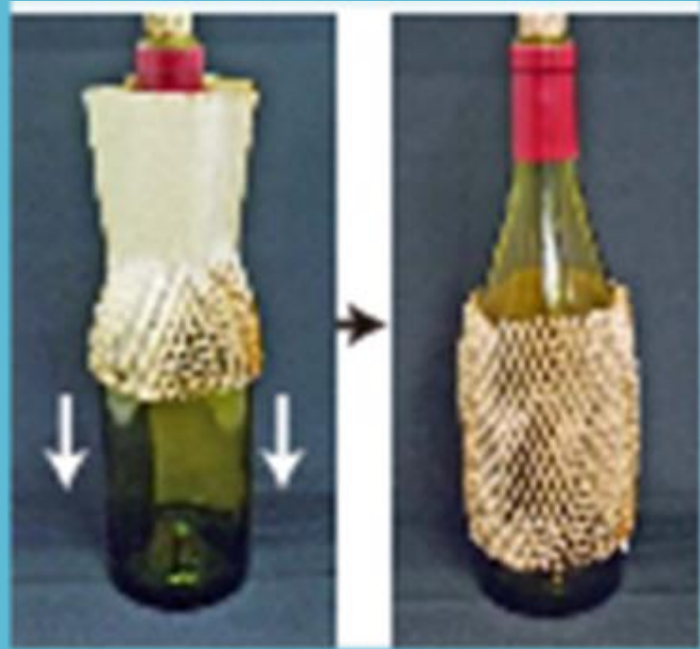
1. Laboratoire PMMH, UMR CNRS 7636, ESPCI Paris PSL, France

2. Dept. of Physics, Tokyo Metropolitan University, Japan



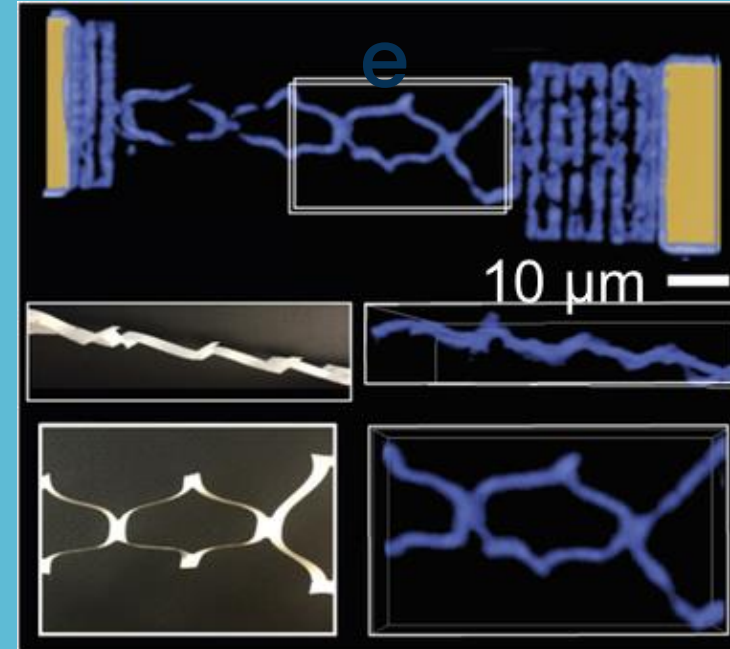
# Kirigami and engineering

## Packaging protection



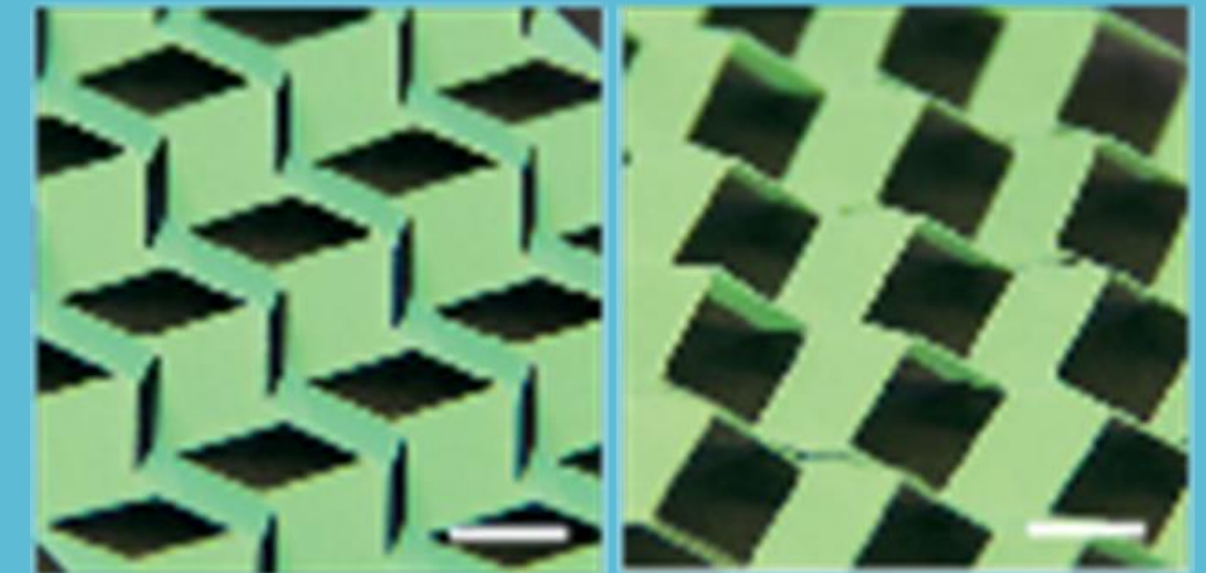
Isobe & Okumura 2016

## Graphen



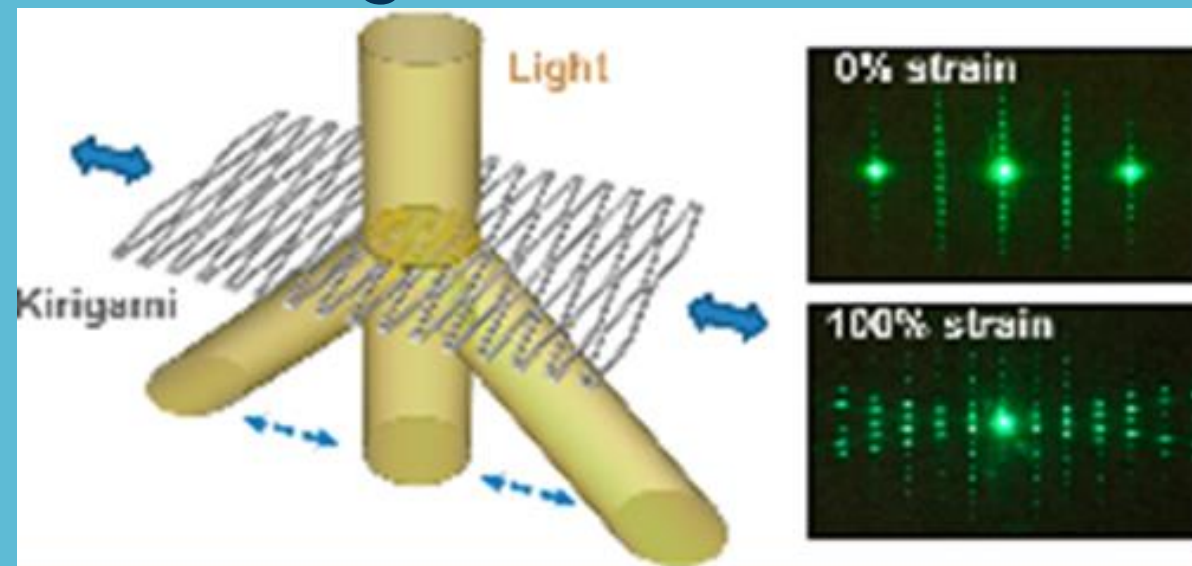
Blees et al. 2015

## Buckling



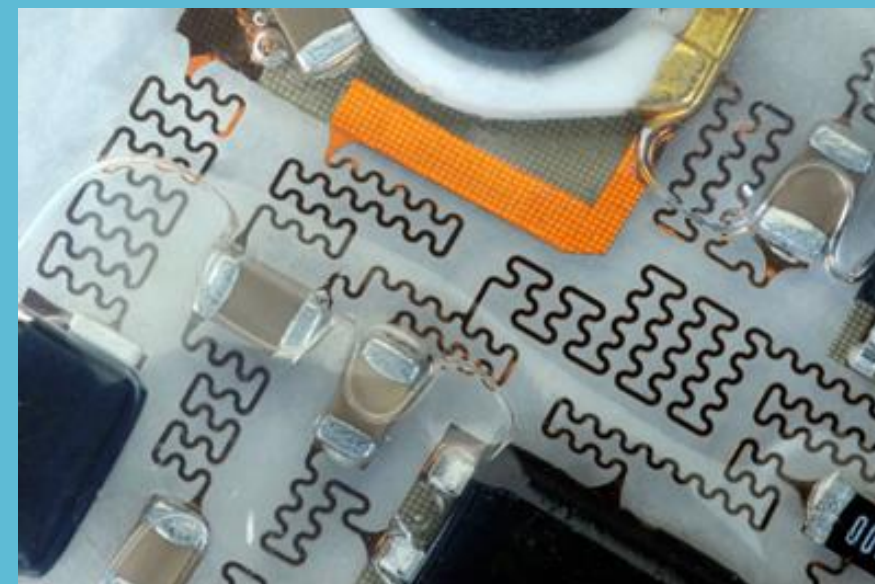
Rafsanjani & Bertoldi 2017

## Light diffraction



Xu et al. 2016

## Stretchable electronics



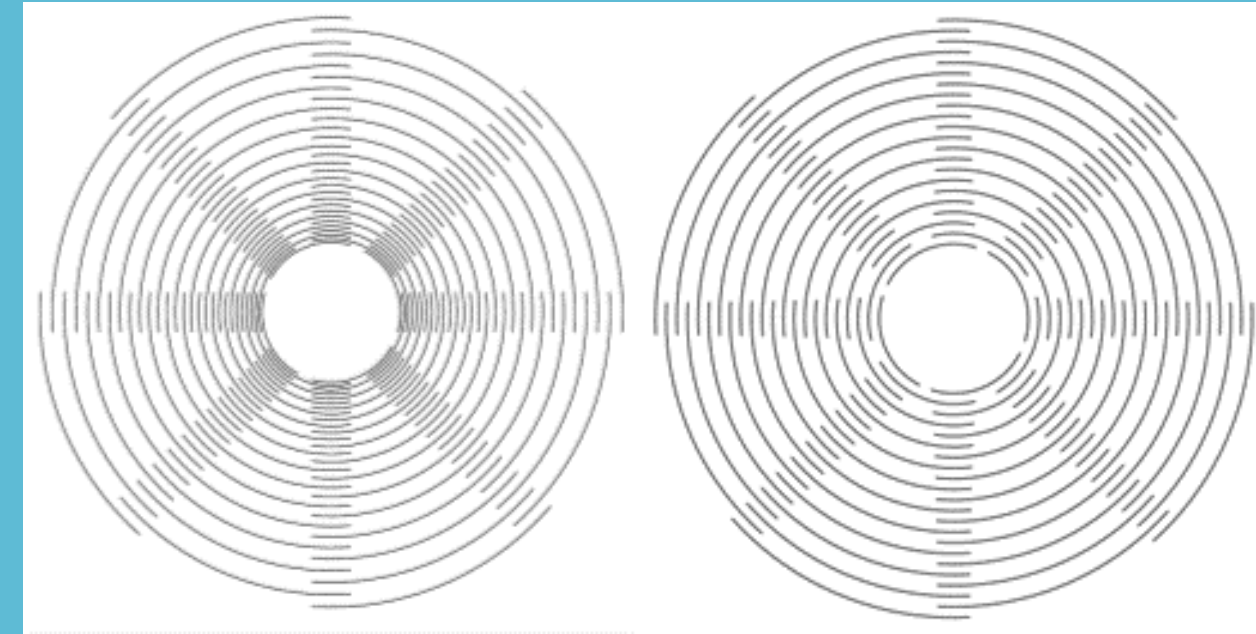
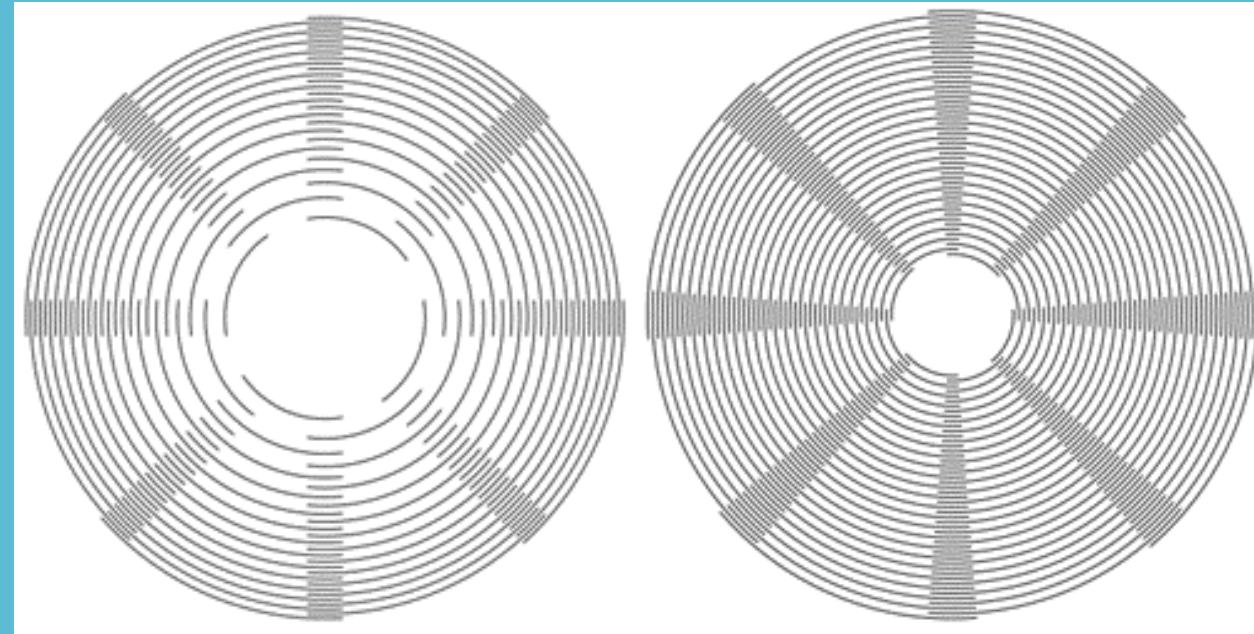
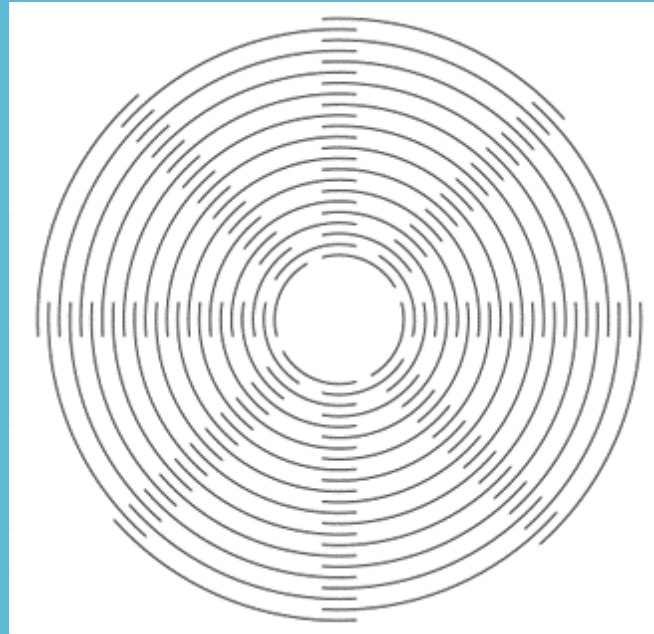
J.Rogers group Illinois

## Solar cells

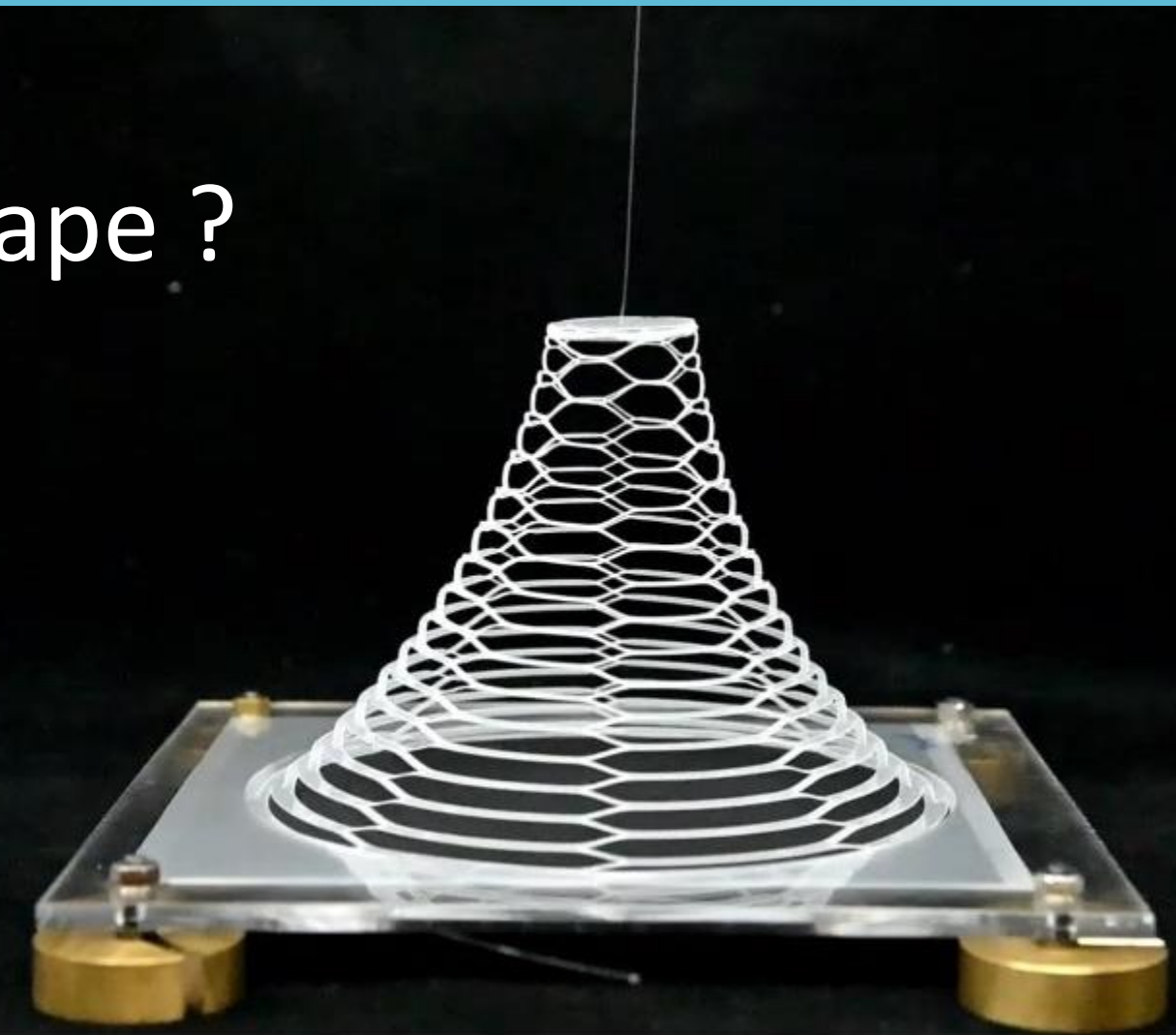
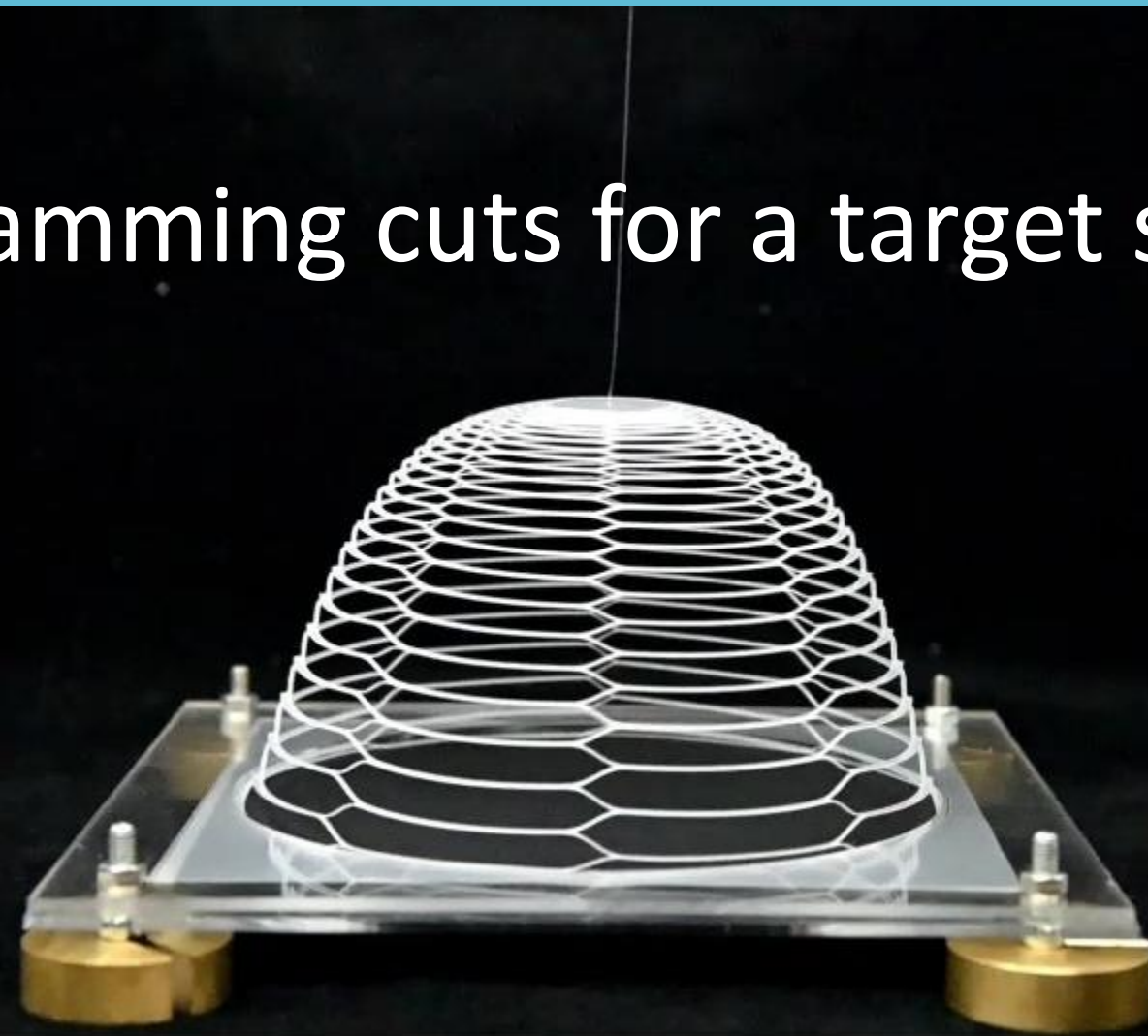
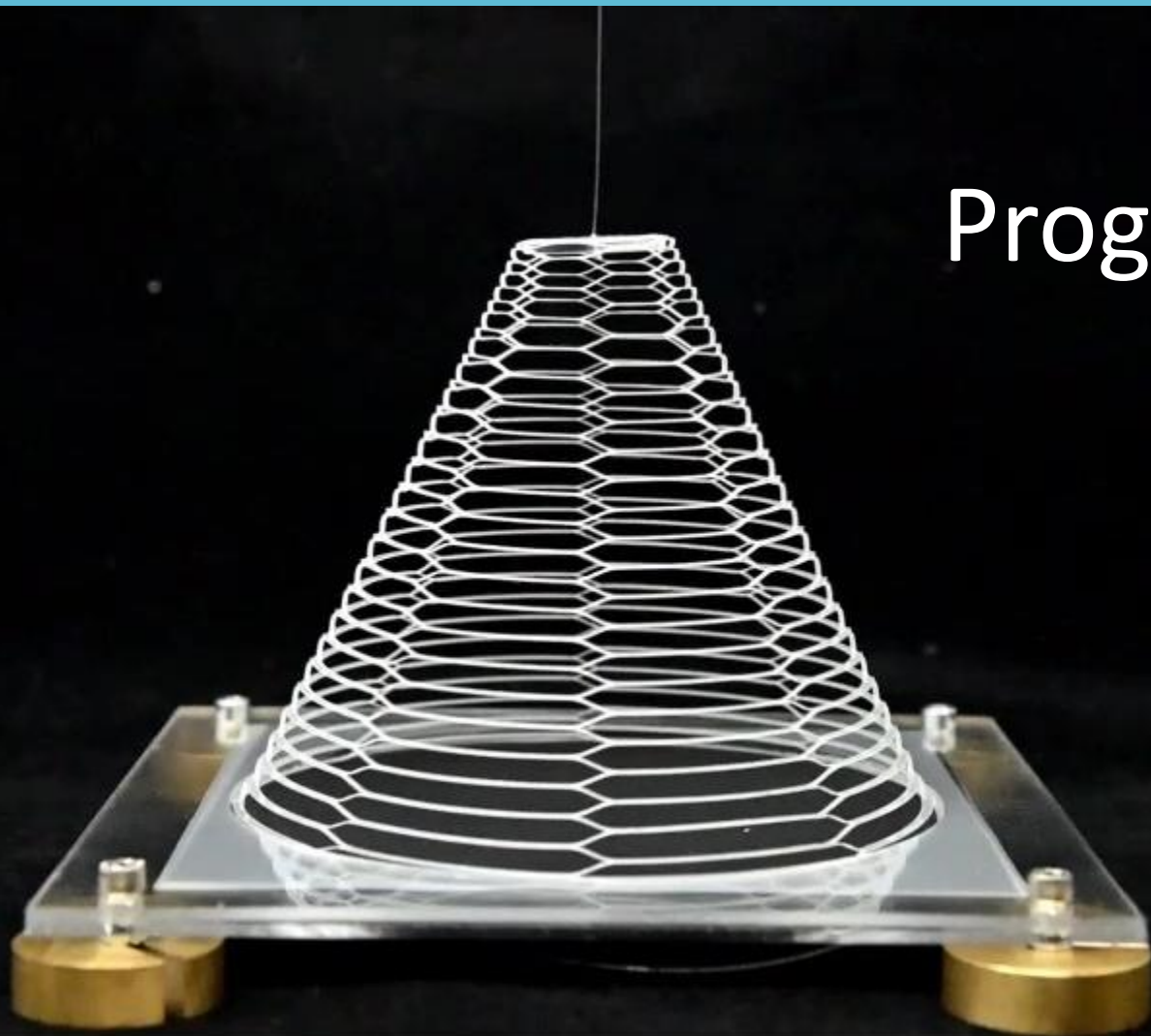


Lamoureux et al. 2015

# Axisymmetric shapes



Programming cuts for a target shape ?



# Asymmetric shapes

