

# Elasto-capillary coiling leads to the fabrication of over-extensible fibers

P. Grandgeorge  
A. Antkowiak  
S. Neukirch

1 mm

RNL - 2016

Silicone oil droplet sitting astride a poly-vinyl siloxane fiber. The system is immersed in a water bath.

In order to minimize surface energies, the fiber buckles and further coils inside the droplet.

The droplet can then be seen as a micro-winch, the overall system is an ultra **extensible solid-liquid composite**.

