

# Buoyancy effects in vertical soap films

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Credit: Tsuneo

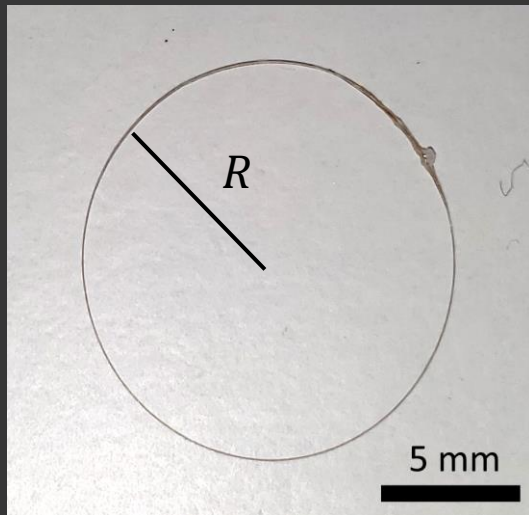


Image from Nierstrasz *et al.* 1998



**How to probe buoyancy effects in soap films?**

→ with a ring of hair glued on itself [1]

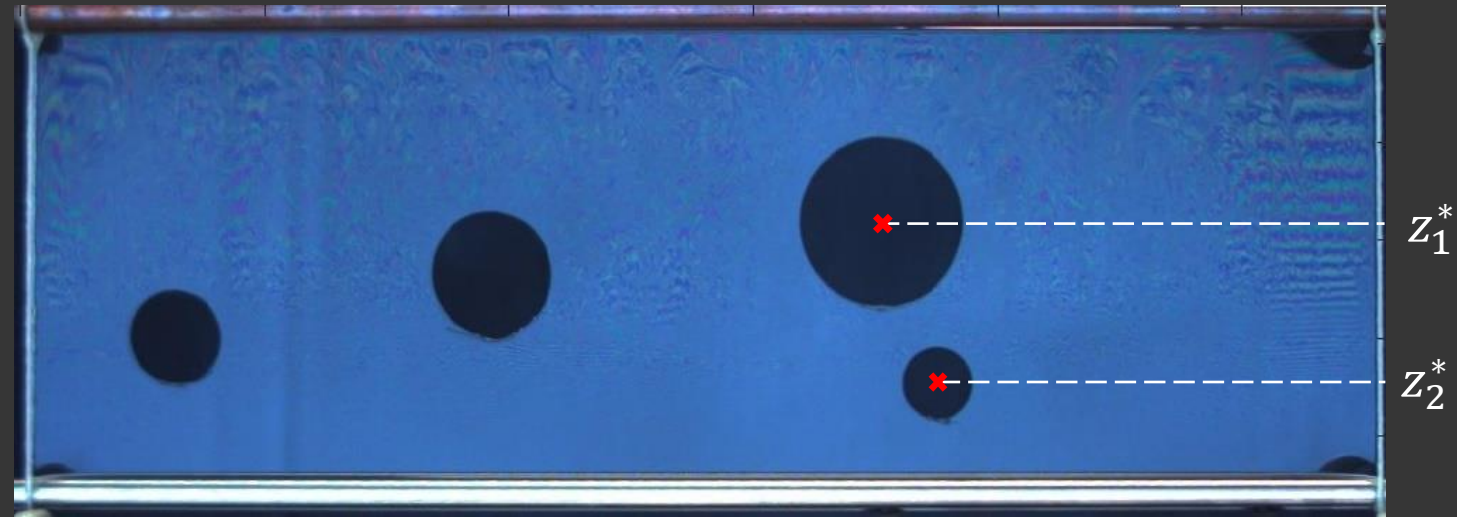


Mass balance between the equivalent fluid of the film and the ring:

$$m_{fluid} = m_{ring}$$



Typical soap film size !



Ring of different sizes introduced into the film

Analogy with a 2D Archimede's force

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