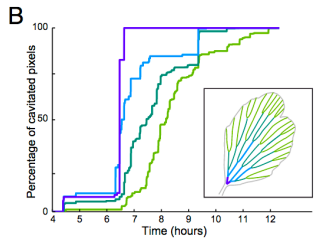
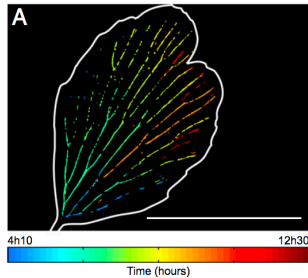
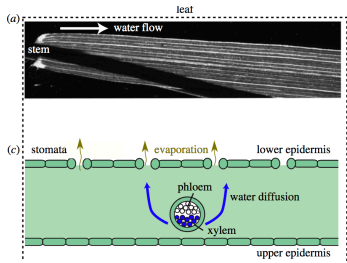


# 1. Real leaves exhibit violent and discontinuous embolization



# Dynamique saccadée du séchage de feuilles biomimétiques Ludovic Keiser, Benjamin Dollet & Philippe Marmottant Université Grenoble Alpes, Laboratoire Interdisciplinaire de Physique (LiPhy)

## 2. Simple bio-mimetic leaves undergo smooth air seeding

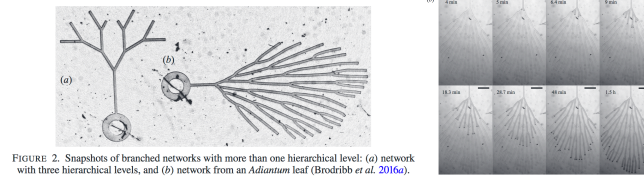
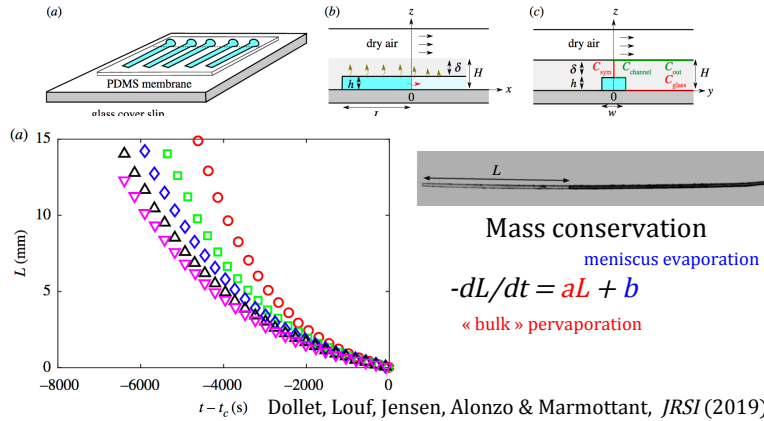
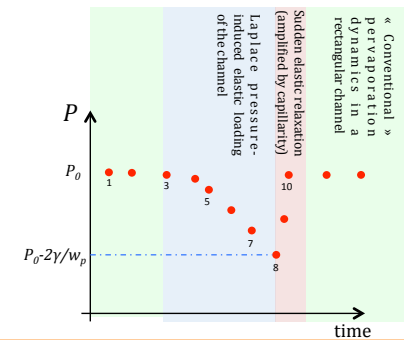
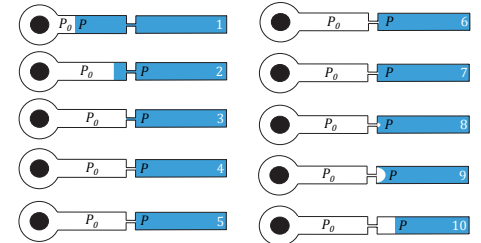
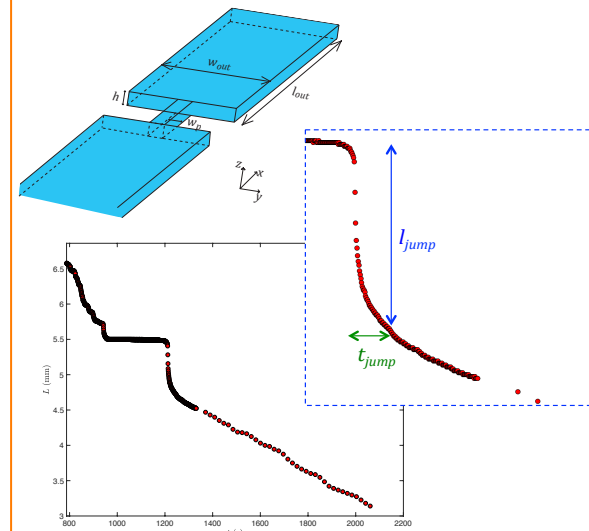


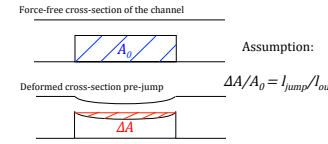
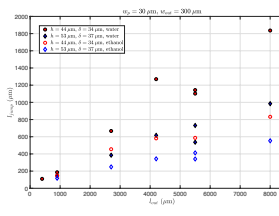
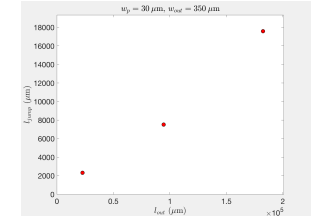
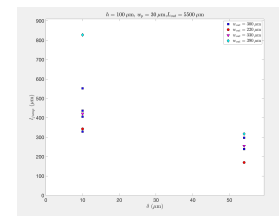
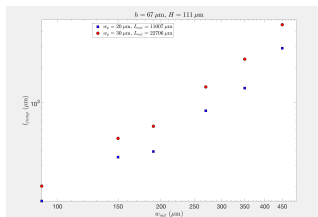
FIGURE 2. Snapshots of branched networks with more than one hierarchical level: (a) network with three hierarchical levels, and (b) network from an *Adiantum* leaf (Brodrribb *et al.* 2016a).

Dollet, Encarnacion, Gautier & Marmottant, *JFM* (2021)

# 3. The presence of biomimetic pits in the network enables to recover these sudden propagations



# 4. These jumps can be interpreted as consequences of the elastic relaxation of the compliant microchannel



	$J_{jump}$	Experiments
$w_{out}$	↗	checked
$J_{out}$	↗	checked
$h$	↗	checked
$\delta$	↗	checked
$w_p$	↗	to be confirmed
$\gamma$	↗	checked

## Perspectives

Simulations of the channel deformations

Complex networks with multiple pits and hierarchical structures

