

Cavitation wave propagation : a coupled vibrations model

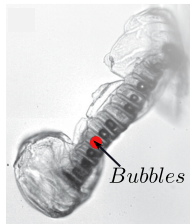
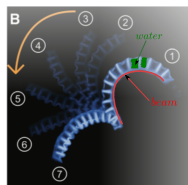
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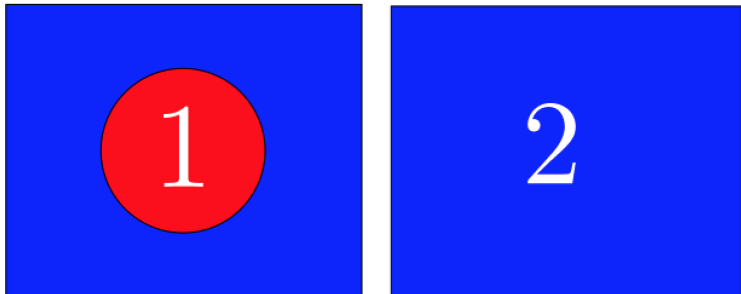
Thematics of my work

- The fern spores ejection mechanism.
- The sporangium is composed by microcavities with water.
- Water evaporation \Rightarrow volume and pressure decrease.
- Cavitation bubbles \Rightarrow volume increases \Rightarrow spores ejection.



Figures taken from Science Rev. 1215985 (2012)

Ideas of my work



- *Problem* : The pressure in the microcavity 1 increases \Rightarrow probability to nucleate in the microcavity 2 decreases.
- We found some leads to explain how the first bubble could create another bubble.

Merci de votre Attention