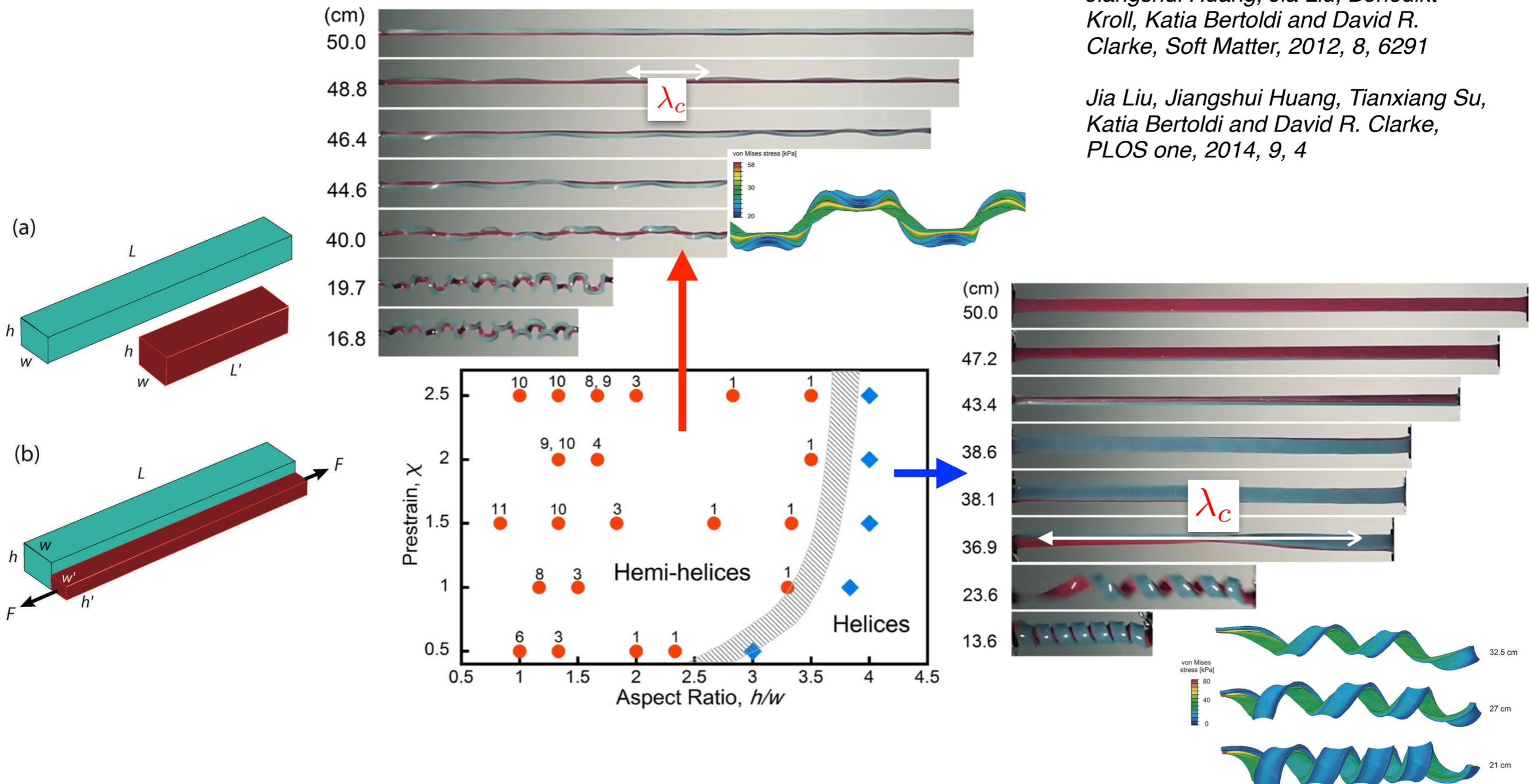


Compétitions entre instabilités micro/ macro dans une bi-poutre

Claire Lestringant, Basile Audoly, ∂ 'Alembert/UPMC

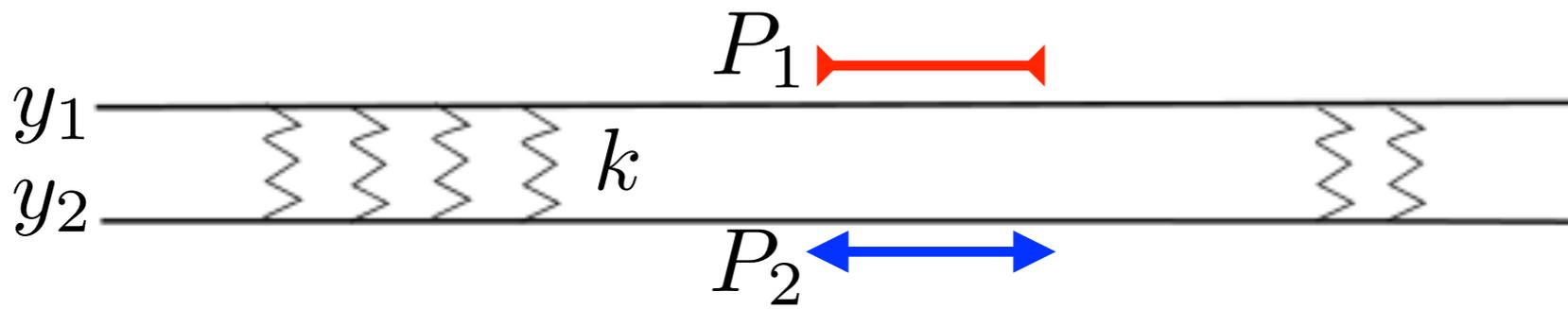
Motivation



Jiangshui Huang, Jia Liu, Benedikt Kroll, Katia Bertoldi and David R. Clarke, *Soft Matter*, 2012, 8, 6291

Jia Liu, Jiangshui Huang, Tianxiang Su, Katia Bertoldi and David R. Clarke, *PLOS one*, 2014, 9, 4

Systeme modèle

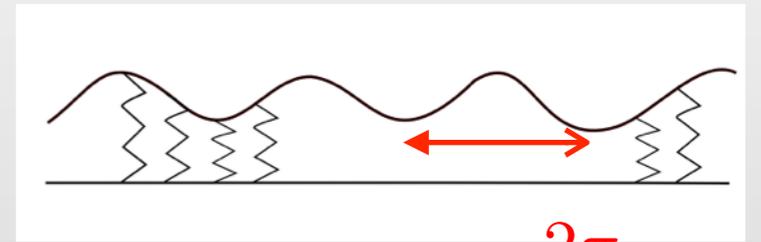


$$\delta P = P_2 - P_1 > 0$$

$$P_M = \frac{P_1 + P_2}{2}$$

Limite « micro »

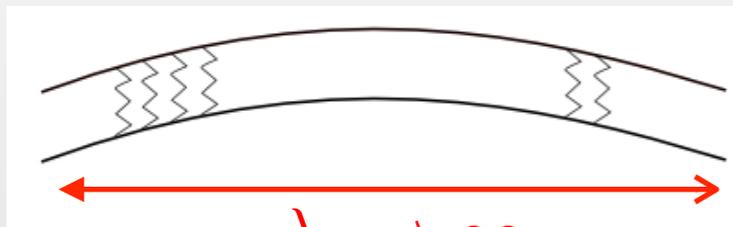
$$k \ll 1$$



$$\lambda_c = \frac{2\pi}{\mu_c}$$

Limite « macro »

$$k > \frac{\delta P^2}{8}$$



$$\lambda_c \rightarrow \infty$$

$$\mu_c \rightarrow 0$$

