Dynamics of flexible fibers in confined viscous flows
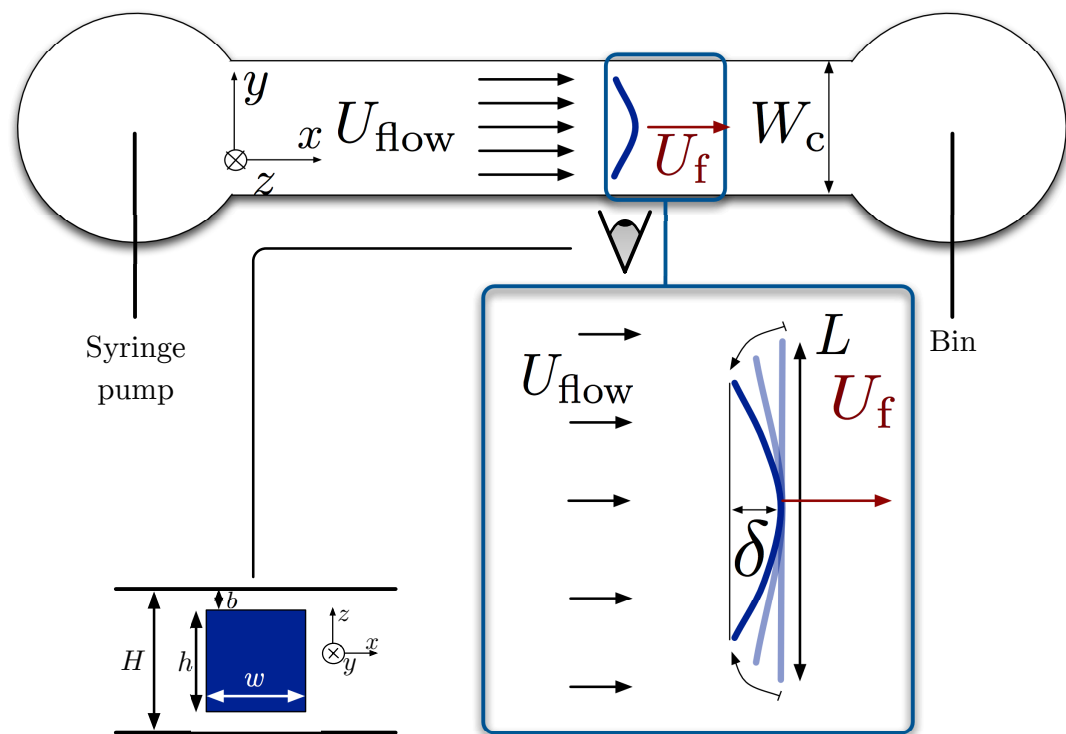
Jean Cappello
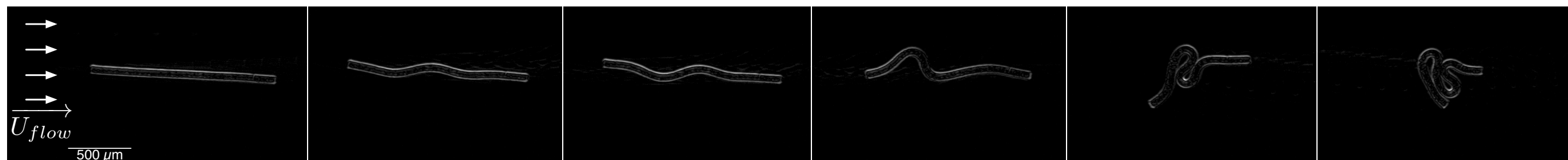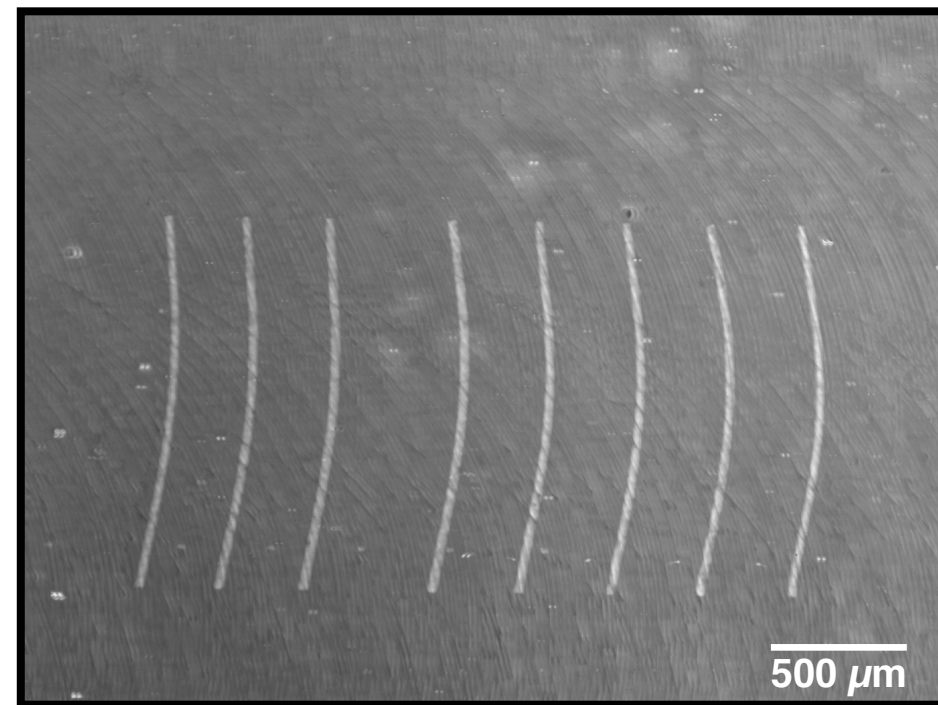
Anke Lindner, Olivia Du Roure, Camille Duprat

Transport of flexible fibers

Competition : Viscosity $\Longleftrightarrow$ Elasticity

$$\delta \propto D = \mu U L^4 / (EI)$$

- Force free
- **Local variation** of the viscous **force**
- Deformation : **second order** phenomenon

Impact of the confinement