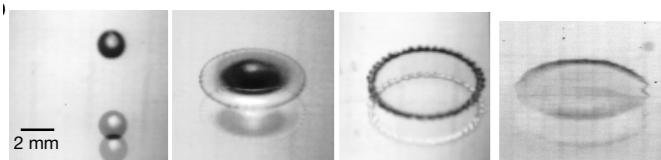
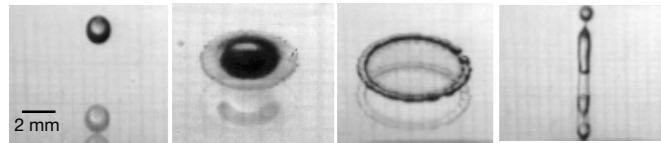


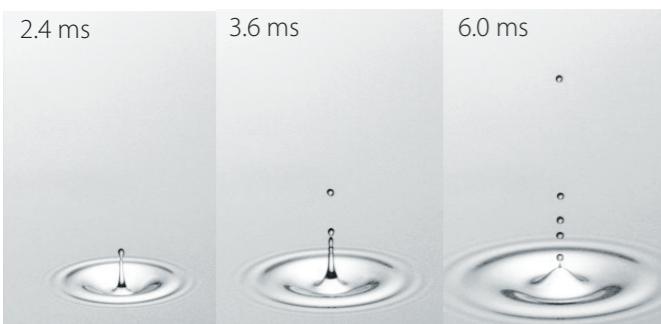
Dynamique de nappes liquides de suspensions

Pascal Raux, Anthony Troger, Pierre Jop et Alban Sauret
 (S.V.I., Saint-Gobain Recherche, Aubervilliers)

Contamination par des particules

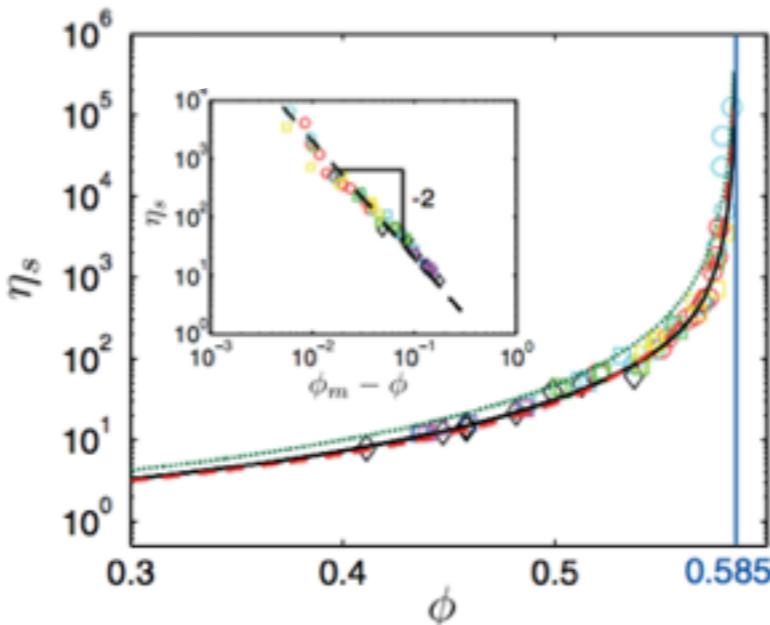


Bergeron et al., Nature (2000)



Ghabache et al., Phys. Fluids (2014)

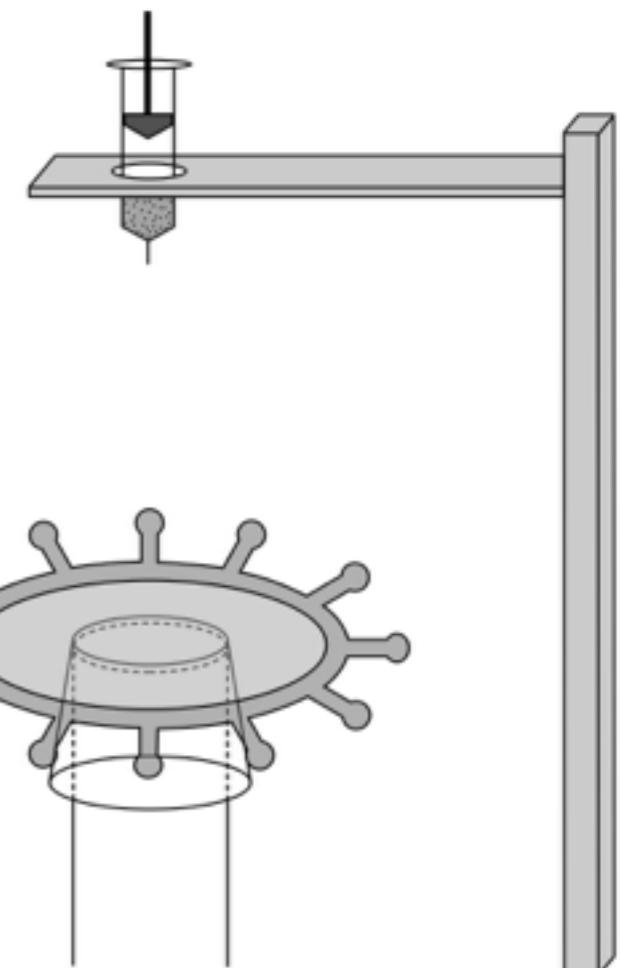
Rhéologie de suspensions non browniennes



Boyer et al., PRL (2011)

Impact de gouttes et formation de nappes liquides

Rozhkov et al., Phys. Fluids (2002)
 Villermaux & Bossa, JFM (2011)



Revêtement de surfaces par rideaux liquides



silicate paint curtains



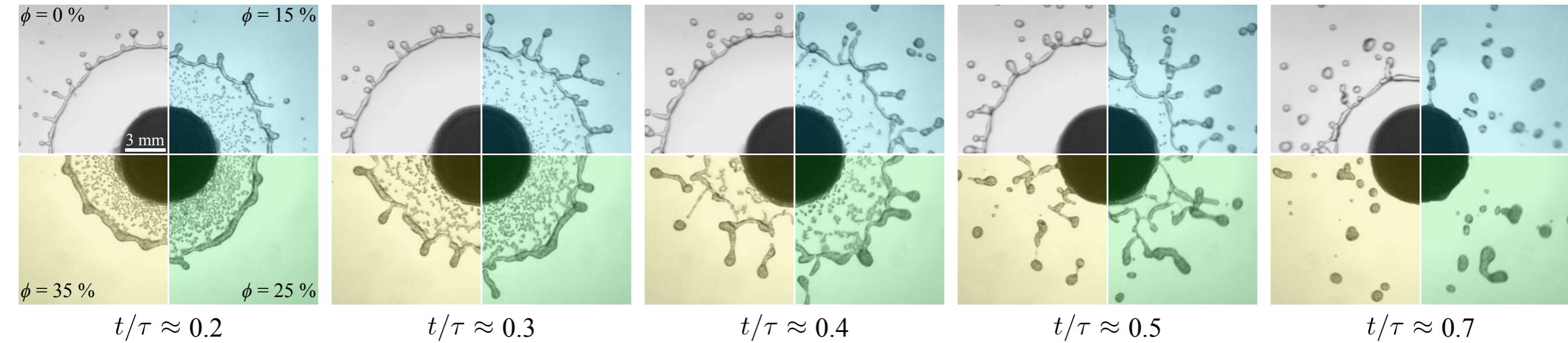
Furbank & Morris, Phys. Fluids (2006)
 Bonnoit et al., Phys. Fluids (2012)

$$We = \frac{\rho u_0^2 d_0}{\gamma} \approx 250 - 800$$

$$\tau = \sqrt{\frac{\rho d_0^3}{6\gamma}} \sim 12 \text{ ms}$$

Dynamique de nappes liquides de suspensions

Pascal Raux, Anthony Troger, Pierre Jop et Alban Sauret
(S.V.I., Saint-Gobain Recherche, Aubervilliers)



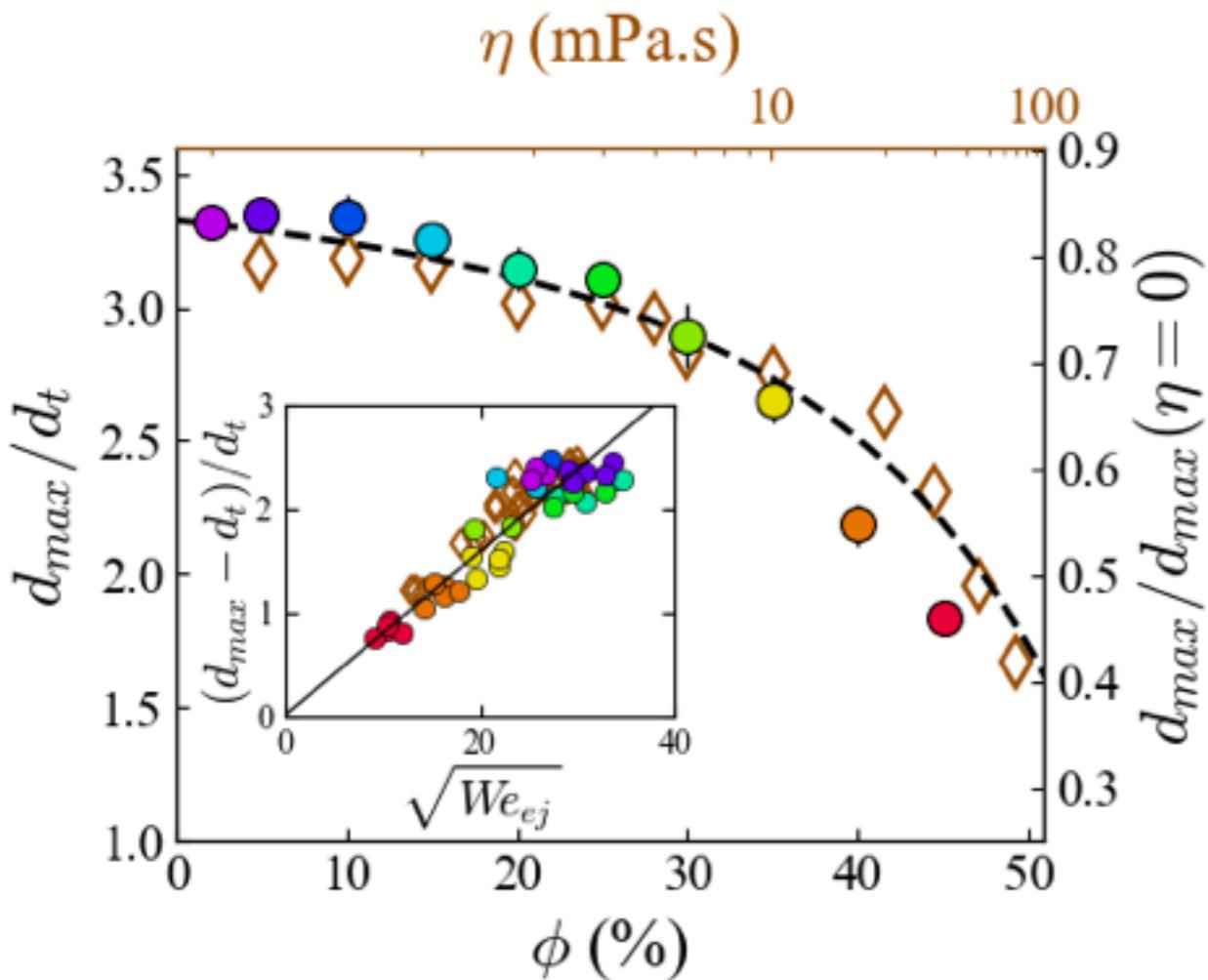
$t/\tau \approx 0.2$

$t/\tau \approx 0.3$

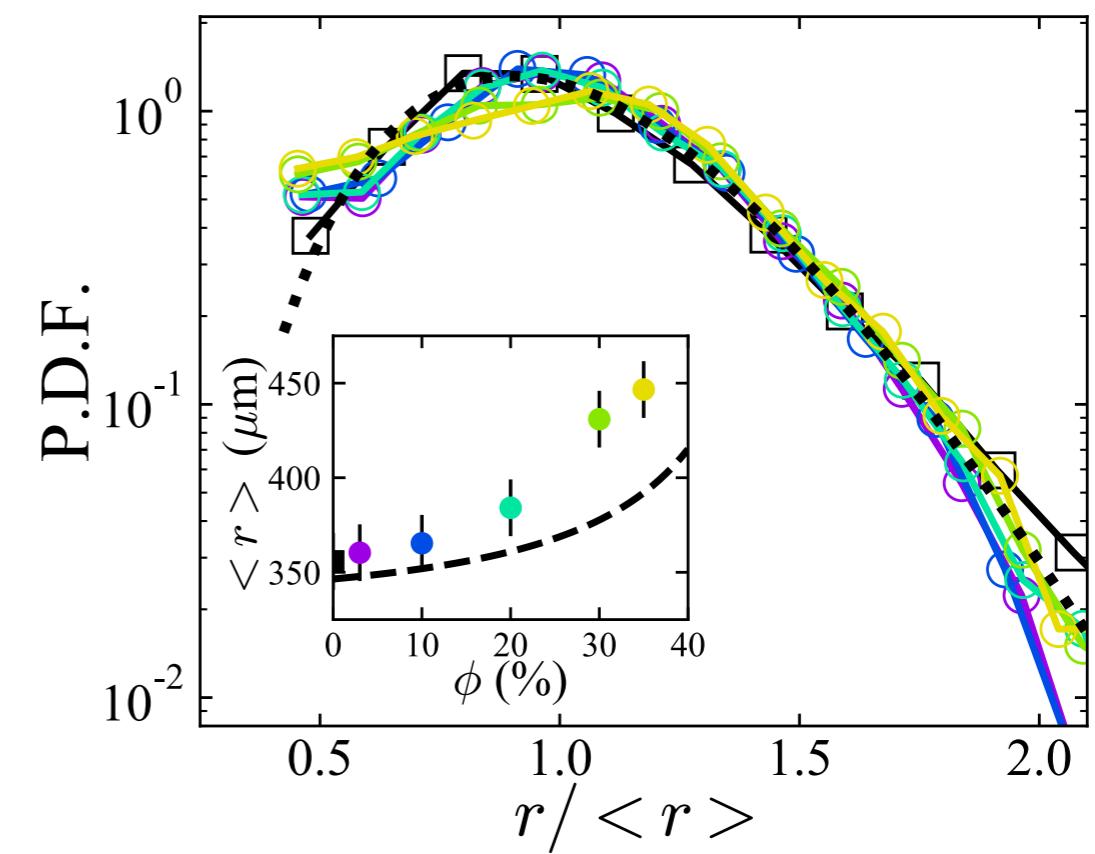
$t/\tau \approx 0.4$

$t/\tau \approx 0.5$

$t/\tau \approx 0.7$



Expansion de la nappe liquide



Atomisation en gouttelettes