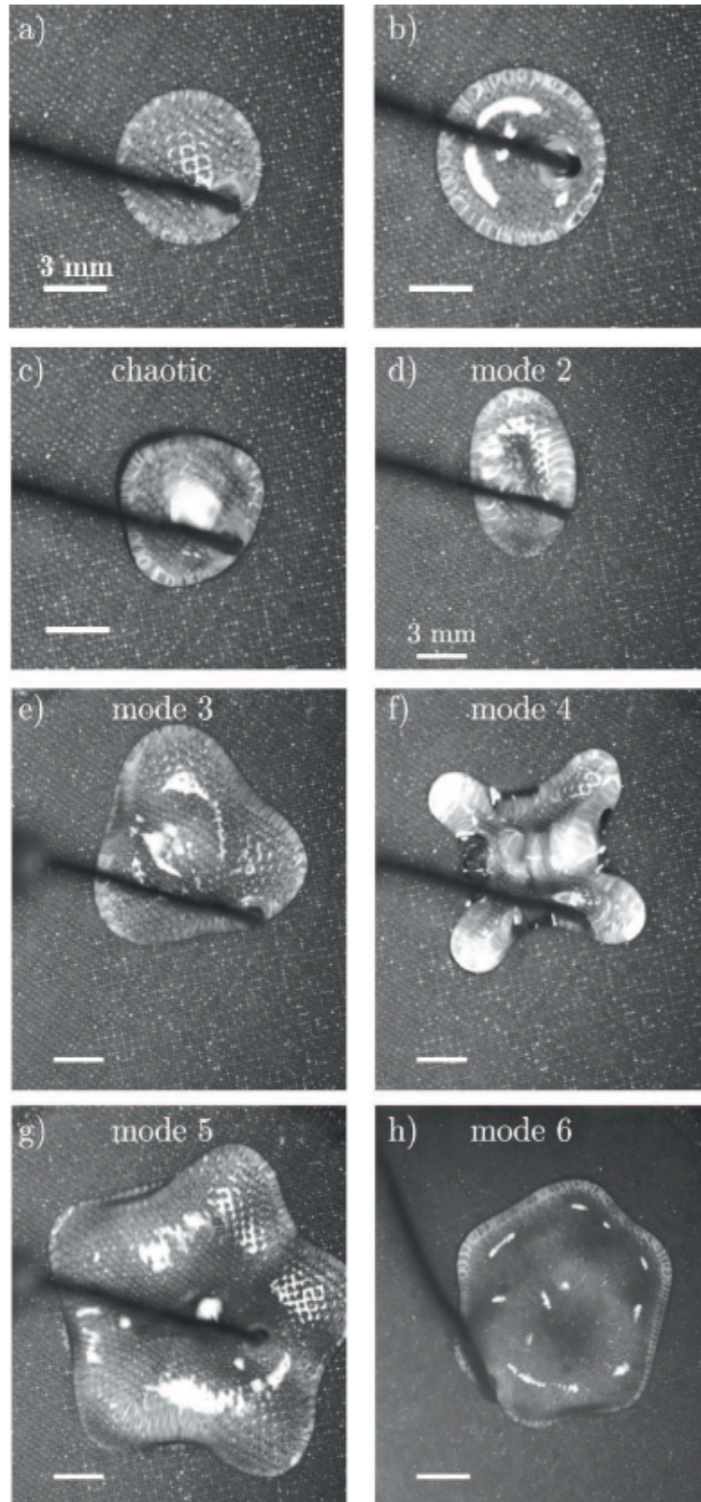
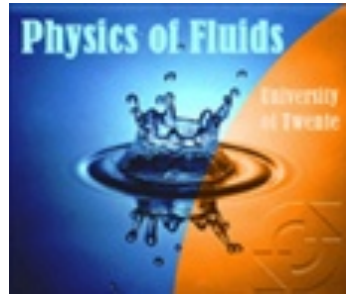


Des Gouttes Etoilées en Lévitation

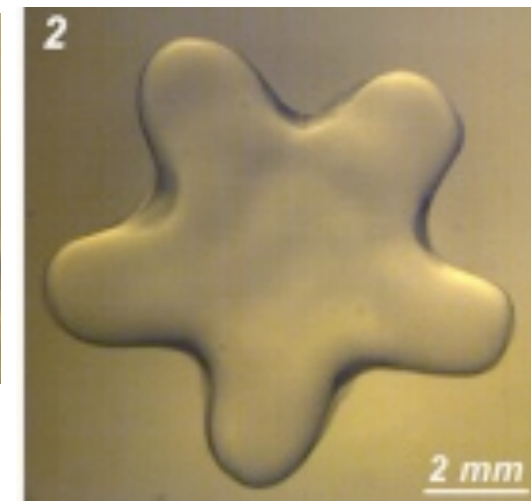
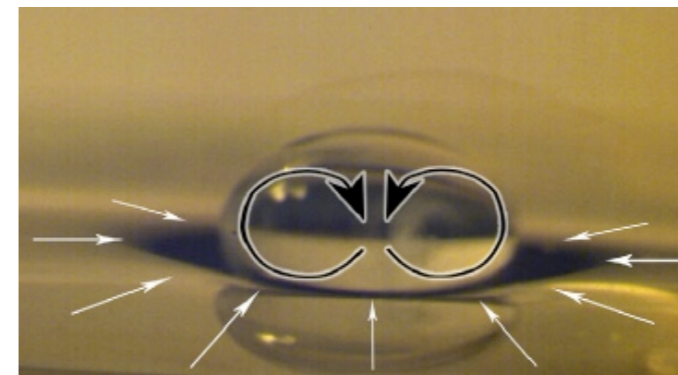
W. Bouwhuis¹, K.G. Winkels¹, P. Brunet², I.R. Peters¹, D. van der Meer¹ and J.H. Snoeijer¹

1 Physics of Fluids Group, Faculty of Science and Technology, University of Twente, 7500 AE Enschede, The Netherlands

2 Laboratoire Matière et Systèmes Complexes (MSC), UMR CNRS 7057/ Univ. Paris Diderot, 75013 Paris, France



Reminiscent of:

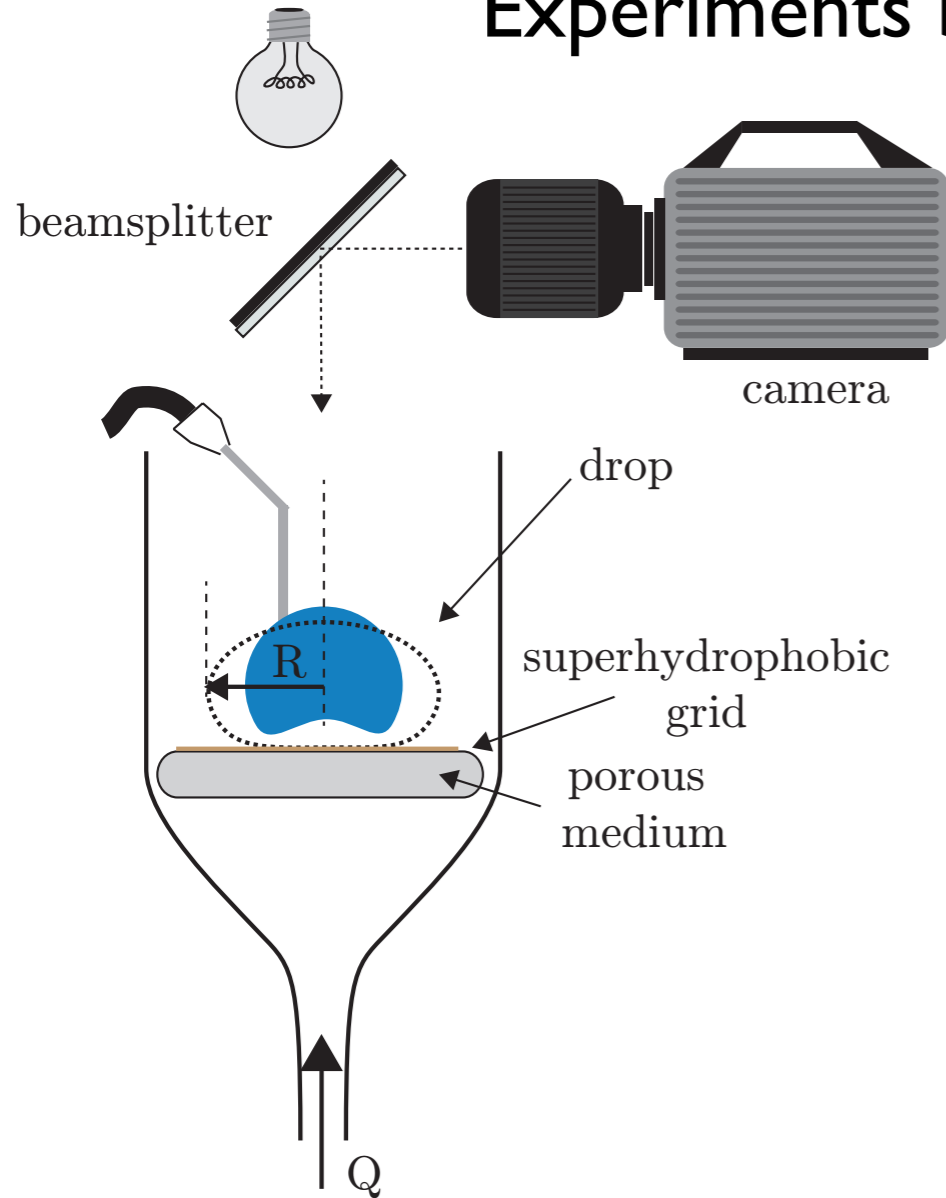


Leidenfrost stars

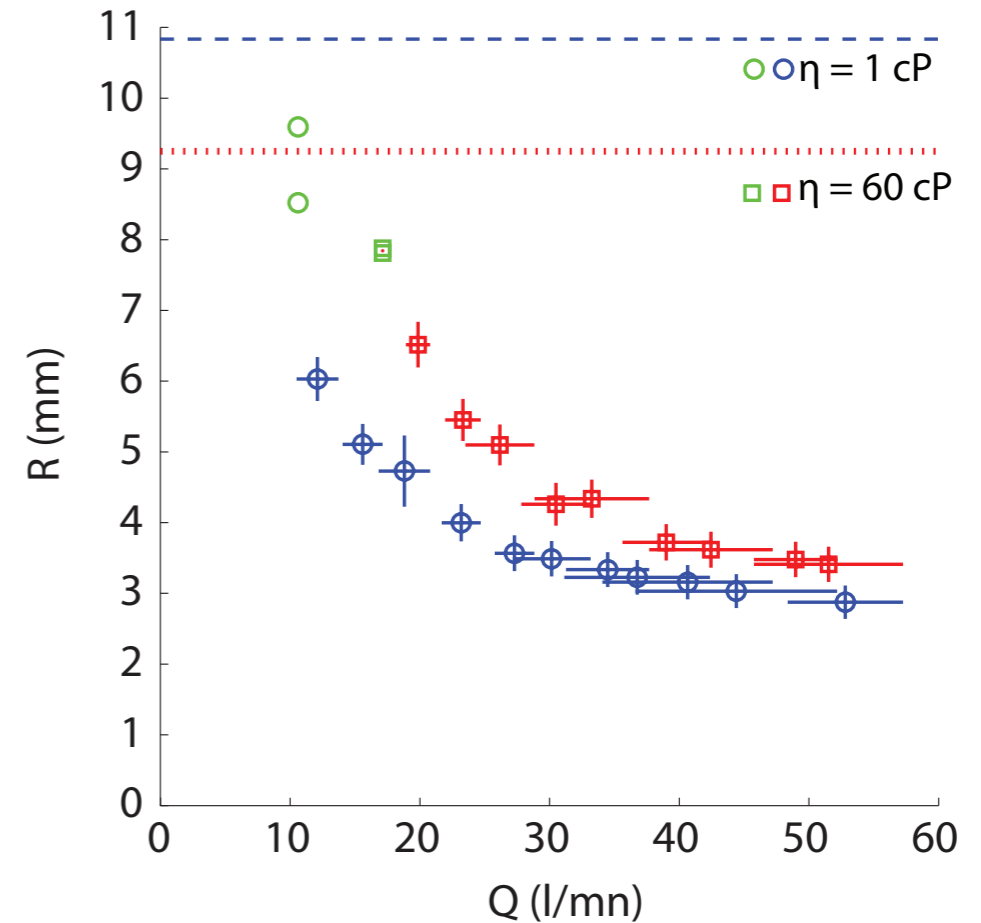
A. Snezhko, E. Ben Jacob & I.S. Aronson,
N. J. Phys. 2008 (liquid nitrogen)

Lévitation «froide» sur coussin d'air

Experiments by K. Winkels



Threshold for the appearance of oscillations



+ Numerical simulations
(W. Bouwhuis)

Green circles \circ correspond to a «chimney» instability when a air bubble grows, rises and breaks through the drop.

See: [Snoeijer, Brunet and Eggers PRE 79, 036307 \(2009\)](#)

Larger drops get destabilized at smaller flow-rate