

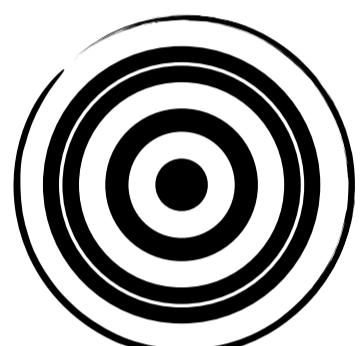


## — AMBRE — BOUILLANT



## PROFIL

PHD STUDENT AT POLYTECHNIQUE & ESPCI  
Supervised by C. Clanet & D. Quéré  
NOVEMBER 2017 - DECEMBER 2019



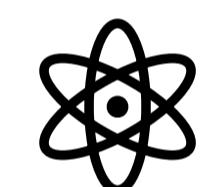
## INTERESTS



FLUID  
DYNAMICS



SOFT  
MATTER



PHYSICS



CHEMISTRY

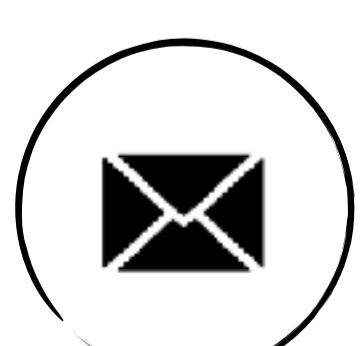


BIOLOGY



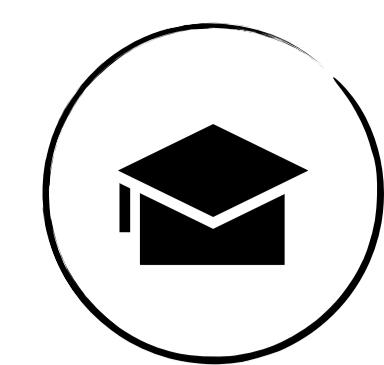
## — AWARDS&HONORS —

- Young Scientific award at the [EFMC12 Conference](#)
- [Milton Van Dyke Price](#) of the APS 70th Gallery of Fluid Motion.
- Winner of the « [Flow'17 video contest](#) ».
- TOTAL scholarship based on merit and academic excellence.



## CONTACT

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## EDUCATION



INTERNATIONAL SUMMER SCHOOL - MEPHISTO - CARGESE INSTITUTE / AUGUST 2018  
Classes related to the MEchanics and Physics of STretchable Objects ([MEPHiSTO](#)).



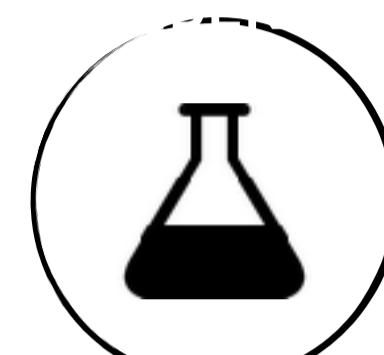
INTERNATIONAL SUMMER SCHOOL - HOKKAIDO UNIVERSITY / JULY - AUGUST 2017  
Polymer physico-chemistry and soft matter: from structural characterisation to rheology.



RESEARCH MASTER - ÉCOLE POLYTECHNIQUE / 2015 - 2016  
International master in « Fluid Mechanics : Fundamentals and Applications ».



ADVANCED MASTER OF SCIENCE & ENGINEER DEGREE - ESPCI Paris / 2012 - 2015  
Cross-disciplinary training in sciences (physics, chemistry & biology) focused on research.



## RESEARCH EXPERIENCES

LABORATOIRE D'HYDRODYNAMIQUE DE L'ÉCOLE POLYTECHNIQUE / MARCH - SEPTEMBER 2016



Experimental study of the internal motion of Leidenfrost drops using PIV and their consequences. Supervisors: D. Quéré & C. Clanet.

PHYSIQUE & MÉCANIQUE DES MILIEUX HÉTÉROGÈNES – ESPCI Paris / SEPTEMBER 2015 - MARCH 2016



Research project on dynamic levitation: condition required to repel impacting liquids on moving solids. Supervisor: D. Quéré.

DEPARTMENT OF APPLIED MATHEMATICS & THEORETICAL PHYSICS - CAMBRIDGE U. / MAY - AUGUST 2015

Investigation of aerotactic behavior of choanoflagellates: development of a microfluidic chip to monitor the swimming response to a gradient of oxygen. Supervisor: R. Goldstein.

Schlumberger Doll Research Center - Boston Area / JULY - DECEMBER 2014



Research internship on settling of dense suspensions in various geometries.  
Supervisors: B. E. V Dussan et A. Robisson.

CIVIL ENGINEERING DEPARTMENT - MC GILL UNIVERSITY - MONTRÉAL / JULY - AUGUST 2013



Elaboration of an *in-situ* process for groundwater decontamination. Supervisor: S. Ghoshal.

LABORATOIRE PMMD - UNIVERSITÉ DE MONTPELLIER / DECEMBER 2012



Research project about the possibility to force drops to rebound indefinitely on an vibrating fluid as a macroscopic wave-particle duality. Supervisor: S. Mora.



## PUBLICATIONS

2018 Bouillant, A., Mouterde, T., Bourrienne, P., Clanet, C., Quéré D.  
« Leidenfrost Spinning Wheels ». *Physical Review Fluids*.

2018 Bouillant, A., Mouterde, T., Bourrienne, P., Clanet, C., Quéré D.  
« Leidenfrost Wheels ». *Nature Physics*.

2018 Gauthier, A., Bouillant, A., Clanet, C., Quéré D.  
« Aerodynamic repellency of impacting liquids ». *Physical Review Fluids*.

2016 Kirkegaard, J. B., Bouillant, A., Marron, A. O., Leptos, K. C., Goldstein, R. E.  
« Aerotaxis in the closest relatives of animals ». *eLife*.