

Haocheng YANG (杨昊澄) - CV

Date of birth July 1998
Nationality Chinese
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Website <https://hcyang-math.github.io/>

Employment

09/2025-now **NYU Abu Dhabi**, Abu Dhabi, United Arab Emirates
Position : Post-Doctoral Associate (Mentor : Taoufik Hmidi)

Education

2022-2025 **ENS Paris-Saclay**, Gif-sur-Yvette, France
Diploma : PhD in Applied Mathematics (defense in June 2025)
Thesis : Existence, Instability and Energy Partition for Linear or Nonlinear Evolution Equations
Issued from Fluid Mechanics [HAL]
Directions : Thomas ALAZARD, co-direction with Jean-Marc DELORT

2020-2022 **Université Paris-Saclay**, Orsay, France
Diploma : Master Hadamard

2016-2020 **University of Chinese Academy of Science**, Beijing, China
Diploma : Bachelor of Mathematics and Applied Mathematics

Preprints and Publications

- [4] T. Alazard, C. Shao, H. Yang. Global Well-posedness of a 2D Fluid-structure Interaction Problem with Free Surface. *arXiv:2504.00213*.
- [3] H. Yang. Cauchy Problem for Cylinder-like Capillary Jets. *arXiv:2410.12506*.
- [2] H. Yang. Virial Theorem and Its Applications in Instability of Two-Phase Water-Wave. *arXiv:2405.06517*.
to appear on SIAM Journal on Mathematical Analysis.
- [1] H. Yang. Microlocal Partition of Energy for Fractional-Type Dispersive Equations. *Analysis & PDE* 18-9 (2025), 2081–2143. DOI 10.2140/apde.2025.18.2081.

Talks and Posters

05/2025 **AG Nichtlineare Partielle Differentialgleichungen (KIT)** - Karlsruhe, Germany

04/2025 **Junior Analysis Seminar (ICL)** - London, United Kingdom

01/2025 **Analysis and PDE seminar (CY)** - Cergy, France

11/2024 **Mathematics of fluids in motion: Recent results and trends** - Marseille, France

06/2024 **Journées Écoulements & Fluides - Saclay** - Gif-sur-Yvette, France

01/2024 **Long Time Behavior and Singularity Formation in PDEs: Part VI** - Abu Dhabi, United Arab Emirates

12/2023 **Séminaire des doctorants d'analyse d'Orsay** - Orsay, France

Teaching Experiences

- 01/2025-04/2025** **LIS2PCST Système linéaire**, Université Paris-Saclay, Orsay, France
- 01/2024-05/2024** **L1 Math 3 - Analyse 1**, Université Paris-Saclay, Orsay, France
- 09/2023-12/2023** **L1 Maths 2 : Algèbre et Géométrie**, Université Paris-Saclay, Orsay, France
- 01/2023-05/2023** **L1 Math 3 - Analyse 1**, Université Paris-Saclay, Orsay, France
- 10/2022-12/2022** **L1 Soutien Math**, Université Paris-Saclay, Orsay, France

Scholarship and Awards

- 2022-2025** **Allocations Doctorales LMH**
- 2020-2022** **Bourses Master Sophie Germain**
- 2016-2019** **Student Scholarship of UCAS**

Skills

- Language** Chinese (native), English (advanced), French (intermediary)
- Computer** C, Python, \LaTeX