

CHUHAO HUANG (黄楚昊)

CONTACT INFORMATION

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RESEARCH INTERESTS

My research interests lie at the interface between algebraic topology and algebraic geometry, with a particular focus on applying techniques from cobordism theory to the study of algebraic cycles.

Keywords: Algebraic cycles, Complex cobordism, Hodge theory, etc.

CURRENT POSITION

École Normale Supérieure *Sep 2024 - expected July 2027*
Currently, I'm pursuing a Ph.D in mathematics at ENS under the supervision of [Olivier Benoist](#).

EDUCATION

École Normale Supérieure *Sep 2023 - July 2024*
Préthèse in Mathematics, under the supervision of [Olivier Benoist](#).

École Normale Supérieure & Sorbonne Université *Sep 2021 - July 2023*
Normalien via *Sélection Internationale*
M.S. in Mathematics
Mentions pour M1 et M2: Très Bien.

Peking University *Sep 2018 - July 2022*
B.S. in Mathematics, supervised by [Bohan Fang](#).

RESEARCH

Smoothing low-dimensional cycles in algebraic cobordism *Year 2026*
Preprint, arXiv: [2605.04347](https://arxiv.org/abs/2605.04347).

THESIS AND NOTES

Quillen's Theorem in Complex Cobordism and its Applications *Year 2023*
Mentored by Olivier Benoist
M2 thesis at École Normale Supérieure and Sorbonne Université: [Here](#).

Arbres et Amalgames *Year 2022*
Mentored by Gaëtan Chenevier, jointed work with Yuxiao Xie
First-year thesis (*Mémoire de première année*) at École Normale Supérieure: [Here](#).

Topics in Model Categories *Year 2022*
Mentored by Bohan Fang
Undergraduate thesis at Peking University: [Here](#).

Mirror Symmetry of Elliptic Curves *Year 2020*

Mentored by Owen Barrett

Undergraduate research paper for the REU program of Chicago University: [Here](#).

A longer but more self-contained version can be found [Here](#).

TEACHING EXPERIENCE

Teaching Assistant / Chargé de TD, Algebraic Topology (Niveau M1) *ENS, Spring 2026*

Led tutorial sessions (travaux dirigés), prepared [exercise solutions](#).

Advising *Mémoire de première année*

ENS, Spring 2025

Advising two undergraduate students on their first year thesis in Chern–Weil theory.

HONOR

Freshman Scholarship, Peking University

Year 2018

Gold Medal, 32nd Chinese Mathematics Olympiad (CMO)

Year 2017

Selected for Chinese national training team.

LANGUAGE

Mandarin (*native*), English (*fluent*), French (*intermediate*)

SKILL

Python, C, C++, LaTeX