



Chengzhi Ye

葉誠智

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 [Chengzhi Ye](#)

Skills



Mathematica



MATLAB



Julia



Python



COMSOL



OpenFOAM

Spoken Languages



French

DALF - C1 (74.0/100.0)



English

CAE - C1 Advanced



German

Beginner - A2+



Mandarin

Native speaker

Internship in Condensed Matter Theory

April 2025 – July 2025

Theoretical Physics grad. at
École Normale Supérieure de Lyon

Education

2024-2026 M.Sc. **École Normale Supérieure de Lyon**

2023-2024 B.Sc. Normalien-Élève, ranked 2nd in the national admission exams,
Lyon, France B.Sc. graduated with 42 ECTS out of 60 scored full marks (20/20)

2021 - 2023 **INSA de Lyon**

Villeurbanne, France Preparatory class, Math-Phys. 120 ECTS, GPA: 4.00 / 4.00

2020 - 2021 **Nanjing University**

Nanjing, China RA program organized by Ministry of Education of China

2018 - 2021 **Nanjing Foreign Language School**

Nanjing, China High school, physics & chemistry specialization

Internship Experience

May 2024 - Sep 2024 **Intern at [CNRS - Quantum Circuit group](#)** *Suprv.: Benjamin Huard*
Gerland, FR Quantum controls generation for preparing cat states in a $\lambda/4$ cavity coupled to a superconducting qubit, compared with the reinforcement learning's performance in the [ARTEMIS](#) project.

Jun 2023 - Aug 2023 **Research Assistant at [LaMCoS](#)** *Suprv.: Benyebka Bou-Saïd*
La Doua, FR Parameter optimization of fluid-structure interaction of a CFD simulation in the [RHU ICELAND](#) project.

Publication

[2409.05557](#) **[quant-ph]** H. Hutin, P. Bilous, C. Ye, S. Abdollahi, L. Cros, T. Dvir, T. Shah, Y. Cohen, A. Bienfait, F. Marquardt, B. Huard. PRX Quantum, (in revision 2024). Preparing Schrödinger cat states in a microwave cavity using a neural network. DOI: [10.48550/arXiv.2409.05557](#).

Projects

Sep 2024 - Ongoing **Band Structure of Topoelectric Circuit** *Suprv.: Audrey Bienfait*
- Realization of a Möbius topology on a printed RF circuit network;
- Verifying bulk band gaps containing localized defect modes and propagating edge states by site-resolved response to excitations.

Mar 2023 - Jun 2023 **2D Instability of Hanging Chain** *Suprv.: Karine Masenelli-Varlot*
- Nonlinear frequency & amplitude response of driven oscillations on an inextensible chain with a free lower end;
- Stability studies of modes of motion with multiple scales method.

Sep 2020 - Feb 2021 **Analysis of Titanium-Nickel Heat Engine** *Suprv.: Jin Zhou*
- Phenomenological modeling of the austenite-martensite phase transformation in Ti-Ni shape-memory alloy;
- Optimization of output power, compared with prediction.

Awards

Feb 2023 **Best Internship Reports Award 2022** *Fondation de l'INSA Lyon*

Sep 2020 **IYPT 2020 - [International Young Physicists' Tournament](#)** *IYPT Committee*
2nd place ; member of the China national team

Oct 2019 **36th Chinese Physics Olympiad: First Prize** *Chinese Physical Society*