

# Curriculum Vitae

## Yi-Te Huang



Taiwan



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## Experiences

10.2023 – 11.2023  **Visiting Scholar** at Theoretical Quantum Physics Laboratory, Cluster for Pioneering Research, RIKEN, Wakoshi, Saitama, Japan (Prof. Franco Nori's group).


## Education


08.2020 – present  **Ph.D. Physics**, National Cheng Kung University, Tainan, Taiwan.  
CGPA : 4.19 / 4.30 (or 3.95 / 4.00)  
Supervisor : Prof. Yueh-Nan Chen

08.2016 – 06.2020  **B.Sc. Physics**, National Cheng Kung University, Tainan, Taiwan.  
CGPA : 3.91 / 4.30 (or 3.84 / 4.00)  
**Studies focused on Physics, Quantum Mechanics, and Computer Science.**  
**Completed project :** Benchmarking quantum state transfer on quantum devices  
[published in [Phys. Rev. Res. 3, 023038 \(2021\)](#)]

## Awards and Honors

2023  **Honorary Member of Phi Tau Phi Scholastic Honor Society**  
awarded by The Phi Tau Phi Scholastic Honor Society of the Republic of China.

2022  **NCTS Physics 2022 Student Outstanding Paper Award**  
awarded by National Center for Theoretical Sciences (Physics Division).


 **Certificate of Excellence in the Oral Presentation of the 2022 Annual Meeting of the Physical Society of Taiwan**  
awarded by The Physical Society of Taiwan.

## Successful Grant Applications





07.2024 – 02.2025  **Graduate Students Study Abroad Program:** funded NTD 525,000 by National Science and Technology Council, Taiwan.

10.2023 – 11.2023  **Pilot Overseas Internship Program:** funded NTD 76,334 by Ministry of Education, Taiwan.

## Certification

2022  **Chinese Cuisine Cookery - Meat diet** (class C skill category), by Ministry of Labor, Taiwan.

## Skills

- Languages  Strong reading, writing and speaking competencies for Mandarin Chinese and English.
- Coding  Julia, Python, C, C++, GIT, Shell Script, L<sup>A</sup>T<sub>E</sub>X.
- Web Dev.  HTML, CSS, Apache Web Server.
- Misc.  Academic research, Linux Server Management, Chinese Cuisine Cookery - Meat diet

## List of Publications











### Preprints (to be) submitted for publication

- 1 P.-R. Lai, J.-D. Lin, **Y.-T. Huang**, and Y.-N. Chen, “Quick charging of a quantum battery with superposed trajectories”, [arXiv:2307.09010](https://arxiv.org/abs/2307.09010) (2023).

### Journal Articles

- 1 **Y.-T. Huang**, P.-C. Kuo, N. Lambert, M. Cirio, S. Cross, S.-L. Yang, F. Nori, and Y.-N. Chen, “An efficient Julia framework for hierarchical equations of motion in open quantum systems”, [Commun. Phys.](https://doi.org/10.1038/s41534-023-00313-2) **6**, 313 (2023).
- 2 P.-C. Kuo, N. Lambert, M. Cirio, **Y.-T. Huang**, F. Nori, and Y.-N. Chen, “Kondo QED: the Kondo effect and photon trapping in a two-impurity Anderson model ultrastrongly coupled to light”, [Phys. Rev. Res.](https://doi.org/10.1103/PhysRevRes.5.043177) **5**, 043177 (2023).
- 3 F.-J. Chan, **Y.-T. Huang**, J.-D. Lin, H.-Y. Ku, J.-S. Chen, H.-B. Chen, and Y.-N. Chen, “Maxwell’s two-demon engine under pure dephasing noise”, [Phys. Rev. A](https://doi.org/10.1103/PhysRevA.106.052201) **106**, 052201 (2022).
- 4 **Y.-T. Huang**, J.-D. Lin, H.-Y. Ku, and Y.-N. Chen, “Benchmarking quantum state transfer on quantum devices”, [Phys. Rev. Res.](https://doi.org/10.1103/PhysRevRes.3.023038) **3**, 023038 (2021).

## Contributions in International Conferences and Workshops

- 2023  **HierarchicalEOM.jl: An efficient Julia framework for hierarchical equations of motion in open quantum systems**, presented at 22nd International Conference on Electron Dynamics in Semiconductors, Optoelectronics and Nanostructures (EDISON22), 14-18 Aug. 2023, Münster, Germany.  [Poster](#)
-  **An efficient Julia framework for hierarchical equations of motion in open quantum systems**, presented at RIKEN Center for Quantum Computing (RQC) Seminar, 12 Apr. 2023, Saitama, Japan.  [Invited Talk](#)
-  **Heom.jl: An efficient Julia framework for hierarchical equations of motion in open quantum systems**, presented at Taiwanese-German Young Researchers Forum on Quantum Information Science, 17 - 19 Feb. 2023, Tainan, Taiwan.  [Contributed Talk](#)
- 2022  **Amazon Braket Platform**, presented at 2022 Quantum Technology Project Conference, 16 - 17 Dec. 2022, Yilan, Taiwan.  [Invited Talk](#)
-  **Introduction of IBMQ and Amazon Braket**, presented at Workshop on Future Computing with Quantum Bits, 15 Nov. 2022, Tainan, Taiwan.  [Invited Talk](#)

## Contributions in International Conferences and Workshops (continued)

-  **Sharing User Experience on IBM Quantum Computers**, presented at NTU-IBM Quantum System Users Meeting 2022 and Qiskit Hackathon Taiwan 2022, 19 - 21 Jul. 2022, Taipei, Taiwan.  **Invited Talk**
  
-  **Sharing User Experience on Amazon Braket**, presented at AWS Introduction and Resource of Quantum Computation Workshop, 07 Apr. 2022, Tainan, Taiwan.  **Invited Talk**
  
-  **Benchmarking Quantum State Transfer on Quantum Devices using Spatio-temporal Steering**, presented at Young Researchers Forum on Quantum Information Science, 09 - 11 Feb. 2022, Online.  **Contributed Talk**
  
-  **Benchmarking Quantum State Transfer on Quantum Devices using Spatio-temporal Steering**, presented at 2022 Annual Meeting of the Physical Society of Taiwan, 24 - 26 Jan. 2022, Taipei, Taiwan.  **Contributed Talk**
  
- 2020  **Benchmarking Quantum State Transfer on Quantum Devices using Spatio-temporal Steering**, presented at 2020 International Workshop on Quantum Computing, 31 Aug. - 01 Sep. 2020, New Taipei, Taiwan.  **Poster**