

# Yuanze DING

Physics Ph.D. Candidate

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## EDUCATION

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**Wuhan University**, Wuhan, Hubei province, China September 2018 - June 2022  
**B.S. in Physics**, School of Physics and Technology & **Honor Science Program** of Hongyi College  
Cumulative GPA: 3.88/4.00, rank 1/44

**California Institute of Technology**, Pasadena, CA, United States September 2022 - Present  
**Ph.D. in Physics**, Division of Physics, Mathematics and Astronomy  
Advisor: Prof. Fiona Harrison

## PUBLICATIONS

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**Yuanze Ding**, Javier A. García, Timothy R. Kallman et al., *Next Generation Accretion Disk Reflection Model: High-Density Plasma Effects*, submitted to ApJ.

**Yuanze Ding**, Javier A. García, Timothy R. Kallman & Fiona A. Harrison, Implementing High Density Corrections in Accretion Disk Reflection Model, 2023, American Astronomical Society Meeting Abstracts, 55, Article 124.08

**Yuanze Ding**, Ruancun Li, Luis C. Ho and Claudio Ricci, *Accretion Disk Outflow during the X-ray Flare of the Super-Eddington Active Nucleus of 1 Zwicky 1*, 2022, ApJ, 931, 77.

**Yuanze Ding** et al., *QPOs and orbital elements of X-ray binary 4U 0115+63 during the 2017 outburst observed by Insight-HXMT*, 2021, MNRAS, 503, 4, 6045.

**Yuanze Ding** et al., *Timing and spectral variability of high mass X-ray pulsar GX 301-2 over orbital phases viewed by Insight-HXMT*, 2021, MNRAS, 506, 2, 2712.

X. Chen, W. Wang, Y. M. Tang and **Yuanze Ding** et al., *Relation of cyclotron resonant energy and luminosity in a strongly magnetized neutron star GRO J1008-57 observed by Insight-HXMT*, 2021, ApJ, 919, 33.

X. Chen, W. Wang, and **Yuanze Ding** et al., *Wavelet analysis of MAXI J1535-571 with Insight-HXMT*, submitted to MNRAS.

Q. Liu, W. Wang, and X. Chen and **Yuanze Ding** et al., *Variations of cyclotron resonant scattering features in Vela X-1 revealed with Insight-HXMT*, in prep.

## SELECTED HONORS AND AWARDS

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Caltech C Fellowship  
*California Institute of Technology* September 2022

Ramon Scholarship of Wuhan University  
*4/524, Wuhan University* May 2022

First-class Scholarship of Wuhan University  
*top 5%, Wuhan University* October 2019&21

First-class Scholarship for excellent young Astronomers  
*1/524, National Astronomical Observatories* October 2019

Model Student at Wuhan University  
*top 10%, Wuhan University* October 2019&20&21

National Astronomical Observatories Scholarship  
*3/524, National Astronomical Observatories* October 2020

1st Prize, 12th Chinese Undergraduate Physics Tournament of Central and South China  
*Leader of Top 2 team, Ministry of Education of China* May 2021

1st Prize, Outstanding Undergraduate Students in Academic Record  
*Top 7 undergraduate students in China, Ministry of Education of China* November 2021

1st Prize, President scholarship for creative learning  
*12/30000, Wuhan University* November 2021

## COMMUNITY ENGAGEMENT & VOLUNTEER ACTIVITY

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### Chorus of Physics Department

October 2018 – January 2020

- Organize chorus training and performance.
- Accompany for the department chorus. We won the highest place since 2016 in campus culture festival.

### Reading to the Blind

October 2018 – January 2020

- Read physics text book for the Blind
- Helped a talented blind person complete his book, which is about mathematical method in physics.

### Leadership in the astronomy class

October 2018 – January 2020

- Serve as a vice-monitor in the astronomy class of physics department.
- Organize class activity, introducing research field of astronomy faculties in WHU.
- Passing information from department to students

## SKILLS AND LANGUAGES

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**Programming language & software:** Bash, Python, Fortran, C, Matlab, Mathematica, Zeus-mp and LaTeX

**Language:** Mandarin Chinese (native), English (IELTS 7.5)