# Yiping Li

Resume

## Personal info


- yipli-kktkt.github.io/PreludeOfMe
- yip.li1572@gmail.com
- Hangzhou, Zhejiang Province, China
- Gap year
- 02/13/1997


## Links

- github.com/YipLi-kktkt
- leetcode.cn/u/rustyaluminum/

## Skills

- Coding (includes Fortran, Python3 etc.)
- Numerical simulation, parallel programming
- Xspec, data visualized by Python3

## Research Interest

- X-ray Astrophysics
- Numerical Simulation
- High-Resolution Spectroscopy

## Education

### School of Astronomy and Space Science, Nanjing University

Sept 2020 – Sept 2023

Degree: Master of Science

Major: Astrophysics

Grade: 3.22/4.0

Research Projects:

- Thesis: A Monte-Carlo Simulation on Resonant Scattering of X-ray Line Emission in Supernova Remnants.
- simulated resonant scattering in SN1987A.

Teaching Assistant:

- Course *College Astronomy*.

Others:

- Volunteered popular science activities as a museum docent for 38 hours in total.
- Volunteered the 2020 & 2022 Welcome Party of the School of Astronomy and Space Science as a performer.
- Lectured in primary students' summer camp.

### Nanjing University of Science and Technology ZiJin College

Sept 2015 – Sept 2019

Degrees: Bachelor of Engineering

Major: Network Engineering

Grade: 3.41/4.0

Projects & Awards:

- Thesis subject: Routing Algorithms in Quantum Private Communication.
- Couple of The Second / Thrid Prize Scholarships.
- National third prize of *the National Service Outsourcing Innovation and Entrepreneurship Competition, 2016*.
- *The Seventh National Professional Software Engineering "Blue Bridge Cup" Design Contest Jiangsu Province Preliminary Round Second Prize*.

## Publications

- **Yiping Li**; Gao-Yuan Zhang; Yang Chen; Lei Sun and Shuinai Zhang, A Monte-Carlo Simulation on Resonant Scattering of X-ray Line Emission in Supernova Remnants, ApJ (`https://iopscience.iop.org/article/10.3847/1538-4357/ad3b94`).
- Lei Sun, Salvatore Orlando, Emanuele Greco, Marco Miceli, **Yiping Li**, Yang Chen, Jacco Vink, Ping Zhou, Unusual X-Ray Oxygen Line Ratios of SN 1987A Arising from the Absorption of Galactic Hot Interstellar Medium, ApJ (`https://iopscience.iop.org/article/10.3847/1538-4357/adb0b5`).

## Conference Experience

Jobs:

- *The high-resolution X-ray and UV spectroscopy (HiXUV) capacity-building workshop* LOC chair
  at Nanjing University, School of Astronomy and Space Science, 2022.
- The member of *SNR and ISM 2023* LOC
  organized by Nanjing University, School of Astronomy and Space Science.

Presentations:

- A simulation of the resonant scattering in SNR, *SNR and ISM 2023*, Nanjing University, Suzhou, Jiangsu Province, China, June 2023.
- "Disk-winds in black hole X-ray binaries", *Unveiling the Dynamic and Energetic Universe with Insight-HXMT for Six Years and Beyond*, Institute of High Energy Physics, Chinese Academy of Sciences, Zhuhai, Guangdong Province, China, January 2024.

## Work Experience

### Wuhan University, School of Physics and Technology

**Full-time, Research Assistant**

Nov. 2023 – Nov. 2024

Responsibilities include:

- Project: Testing disk-winds model in black hole X-ray binaries with RXTE archival.
- Assistant stuffs.

## Personal Statement

### Intro of my Research Experience

1. Resonant scattering simulation in supernova remnant
My masters thesis project was supervised by Prof. Yang Chen. The main purpose is to estimate how RS will influence the SNR observations. I developed the simulation code, employed the observed parameters, published by others' research, and compared the results with Cygnus Loop observation. The research was published (Li et al. 2024).
Meanwhile, I simulated RS in 1987A and the results presented in Sun et al (2025).

2. X-ray binary spectral fit with RXTE data
I was working on an X-ray timing study focusing on black hole X-ray binaries supervised by Dr. Bei You at Wuhan University. I used Xspec to process RXTE spectral data, and we want to test if the wind model (You et al. 2016) exists in X-ray binary commonly.

### PhD program motivation

First, I want to work as an astrophysicist in my whole life, so I need a PhD degree. = I prefer a science research job in the future since I enjoy doing research. Meanwhile, considering the research job requirements both in my home country and other countries, I decided to study my PhD program abroad.
Second, a PhD degree will give more opportunities for the future. I believe that studying at a world-renowned university will make me competitive and improve my skills. So I desire to study in the other half of the earth.



# Yiping Li

## Languages

- Chinese (Native)
- English (TOEFL iBT Score 85)

## Hobbies

- Astronomy
- Photography
- Literature
- Coding