

Qinxun Li

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Education

- 2019 – **■ Bachelor of Science in Astronomy (Expected in June 2023), School of Physical Science University of Science and Technology of China (USTC)**
GPA: 3.78/4.30
Ranking: 4 / 31 in Department of Astronomy
Research Supervisor: Prof. Huiyuan Wang (USTC) and Prof. Wentao Luo (USTC)
Research Co-supervisor: Prof. Christopher J. Miller (Umich) and Prof. Martin Kilbinger (CEA)
Program: Jici Yan Talent Students Program in Physics & Shouguan Wang Talent Students Program in Astronomy

Course and Grade

Basic Math Course	■ Calculus (95 & 86 for two semesters), Linear Algebra (91), Probability and Statistics (95), Function of Complex Variable (87), Equations of Mathematical Physics (87)
General Physics Course	■ Mechanics(86), Space and Time(92), Thermal Physics(89), Electromagnetism(92), Atomic Physics(92)
Theoretical Physics Course	■ Theoretical Mechanics (82), Quantum Mechanics (91), Electrodynamics (93), Thermodynamics and Statistical Physics (91)
Programming Course	■ Computer Programming (90), Computational Physics (87)
Astronomy and Astrophysics Course	■ Introduction to Astronomy (96), Observational Astronomy (95) , A General Survey of Astrophysics (A+), Foundation of Stellar Physics (93) , Astronomical Labs (91), Introduction to Astromechanics and Astrometry (93)
Advanced Course for Graduate Students	■ Group Theory in Physics (90), The Theory of General Relativity (95), Introduction to Astrophysics (85), Observational Astrophysics (93), The Physics and Evolution of Active Galactic Nuclei (92), Galactic Astronomy (90), Cosmology (93), Large Scale Structure in the Universe (86)
Course to be taken in my plan	■ Relativistic Astrophysics, Radio Astronomy, High Energy Astrophysics, Radiative Processes in Astrophysics






Publications

Books


- 1 Zee, A. (2022). *Chinese version of a. zee's quantum field theory in a nutshell* (J. Cai, Y. He, J. Li, Z. Li, H. Liang, **Q. Li**, ... Runge, Trans.). Hefei, China: USTC press.

Research Experience


Galaxy Formation and evolution

- Aug. 2021 – 2022  **Subhalo Properties from SDSS Weak Lensing**, First contributor.
Advisor: Prof. Huiyuan Wang and Prof. Wentao Luo (USTC)
- Oct. 2021 –  **Comparison between Caustic Mass and Weak Lensing Mass**, Second contributor.
Advisor: Prof. Christopher Miller and Prof. Wentao Luo (Umich and USTC)
-  **Environmental differences between AGN, X-ray galaxies and normal galaxies in Chandra Deep Field**, First contributor.
Advisor: Prof. Wentao Luo (USTC)
- Jul. 2022 –  **Scaling Relation between Black Hole Mass and Halo Mass from KiDS and UNIONS**, First contributor.
Advisor: Prof. Wentao Luo and Prof. Matin Kilbinger (USTC and CEA)
- Aug. 2022 –  **Subhalo Scaling Relation from Weak Lensing Observation**, First contributor.
Advisor: Prof. Huiyuan Wang, Prof. Wentao Luo and Prof. Houjun Mo (USTC and Umass)






Observational Cosmology

- Mar. 2021 –  **Dark energy property constrain from KiDS Shear Ratio Test**, First contributor
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Advisor: Prof. Matin Kilbinger and Prof. Wentao Luo (CEA and USTC)

Work Experience


- Feb. – Jul. 2022  **Teaching Assistant** of *Observational Astronomy*
Lecturer: Prof. Qingfeng Zhu

Skills

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|-------------|--|
| Languages |  Strong reading, writing and speaking competencies for English (TOFEL iBT score: 88) |
| Coding |  Python, IDL, Fortran, \LaTeX , ... |
| Data set |  Yang's group catalog, Luo's SDSS shape catalog, TNG simulation, Chandra Deep Field, VOICE shape catalog, KiDS shape catalog, ... |
| Astro Tech. |  Weak Lensing Measurement, Weak Lensing Modeling, MCMC, ... |
| Misc. |  Academic research, teaching (as a TA), training, translation and \LaTeX typesetting. |

Activities

Academic Activities

- Aug. 17 – 25, 2020  **Online Summer School of Theoretical Physics, Atomic Physics and Particle Physics**, Student
Lecture series on frontier topics covering AMO, theoretical physics and particle physics. It was held by Tsinghua University and Peking University

Activities (continued)

- Nov. 28, 2020  **Astronomy Competition for undergrate Students in South China, *The Best Record Winner.***
It is a famous competition held every year by School of Physics and Astronomy, Sun Yat-sen University. The competition covers large fields of modern astrophysics, including high energy astrophysics, AGN, stellar physics, galaxy evolution and cosmology.
- Feb.-Mar., 2021  **Online Seminar on General Relativity and Cosmology for Undergraduates, Organizer and Lecturer.**
This is a seminar held by Inter University Forum of Natural Science for Undergraduates. It covers basic theory of GR, Curve Engine, Compact Objects and Dark Energy. This seminar consists completely of undergraduates and graduates. It was proposed by . **I am the host of this seminar.** I gave a series of lectures of brief Introduction to GR.
- May. 27, 2022  **Academic Seminar for Undergraduate of Department of Astronomy, *Lecturer.***
I give a presentation about weak gravitational lensing and my recent progress on subhalo mass measurement project.