

Huiling Liu

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🏠 [Huiling Liu's Homepage](#)

Education

Fall 2020 – Now 📖 **B.S.in Theoretical Physics, University of Science and Technology of China (USTC)**
Overall GPA: 3.85/4.30(90.17/100)
Ranking: 36/310 in School of Physical Science, 27/310 in last academic year
Research Supervisor: Prof. Huiyuan Wang (USTC)

Research Experience/Publications

Research Interest: Galaxy formation and evolution, Cosmology

Sep 2022-Now 📖 **Investigating the role of radio AGN on galaxy evolution** First contributor.
Supervisor: Prof. Huiyuan Wang(USTC)
Aims: Understanding the process by which massive galaxies and radio galaxies transform into each other. Investigating the correlation between radio galaxies' duty-cycle and their properties.
Abstract: Galaxy-galaxy lensing is a powerful measurement technique that provides a direct way to map the distribution of dark matter around galaxies. In this work, We apply galaxy-galaxy lensing on SDSS catalog to constrain the halo parameters of different types of galaxies.
State: In preparation.

Talks and presentations

June 2023 📖 **Undergraduate Academic Annual Conference:** Investigating the role of radio AGN on galaxy evolution using weak gravitational lensing (Only 16 undergraduate students of USTC are eligible to give this presentation)

Courses

Mathematics	📖 Mathematical Analysis(93,92 for two terms), Linear Algebra (93), Probability and Statistics (99), Function of Complex Variable (90), Equations of Mathematical Physics (93), Stochastic Processes(93)
Programming	📖 Computer Programming(85), Computational Method(90), Fundamentals of Java Software Development(90), Computational Physics(91)
General Physics	📖 Mechanics(99), Thermal Physics(96), Electromagnetism(92), Optics(87), Atomic Physics(96)
Theoretical Physics	📖 Theoretical Mechanics (92), Quantum Mechanics (91), Electrodynamics (92), Thermodynamics and Statistical Physics(88)
Astronomy and Astrophysics	📖 Space and Time(98), A General Survey of Astrophysics(93), Introduction to Astronomy(83), Lecture Course on Astrophysics Frontiers(93)
Graduate Courses.	📖 Observational Astrophysics(84), Introduction to Astrophysics(94), Galactic Astronomy(93), Advanced Quantum Mechanics(87)

Courses (continued)

Courses for next semester  Foundation of Stellar Physics, General Relativity and Cosmology, The Physics and Evolution of Active Galactic Nuclei, Large Scale Structure in the Universe, Solid State Physics

Skills

Programing  Python, MATLAB, Mathematica, IDL, java, basic Linux commands, \LaTeX
Astro Tech  Galaxy-galaxy Lensing Measurement and ESD(excess surface density) Modeling

Selected Awards

2022  Outstanding Student Scholarship (Grade 1)
2021  Outstanding Student Scholarship (Grade 2)
2021,2022  Scholarship for Talent Program(Class A)
2021  The 3rd Undergraduate Physics Tournament of Anhui Province, 1st Prize (Rank: 2/80)

Teaching Assistant

Fall 2022 **Mechanics** lectured by Prof. Yi Wang
Spring 2023 **Thermodynamics** lectured by Prof. Hong Zhu