

WENJUN CHANG

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<https://w-chang-astro.github.io>

EDUCATION

- University of California, Riverside** *Sept 2020 - Present*
Ph.D. in Physics and Astronomy
Advisor: Prof. Gillian Wilson
- University of California, Riverside** *Sept 2020 - June 2021*
M.Sc. in Physics and Astronomy
GPA: 3.98/4.0
- University of Science and Technology of China** *Aug 2016 - June 2020*
B.Sc. in Astronomy
Advisors: Prof. Xu Kong and Prof. Stijn Wuyts
Honors Thesis: *Cold Gas Properties and Dust Attenuation of Nearby Galaxies*

RESEARCH EXPERIENCE

- Graduate Student Researcher** *Oct 2020 - June 2021*
University of California, Riverside (with Prof. Gillian Wilson)
Lead Proj I: Far-Infrared and Radio Insights into the Nature of Ultra-Massive Galaxies at $z \gtrsim 3$.
Lead Proj II: Confirming Quiescent Ultra-Massive Galaxies Using ALMA Dust Continuum.
Lead Proj III: Statistical Far-Infrared Analysis of a Large Sample of Ultra-Massive Galaxies at $z > 3$.
- Research Assistant** *June 2020 - Sept 2020*
University of Science and Technology of China (with Prof. Guanwen Fang and Prof. Xu Kong)
Lead Proj: The Effect of Environment on Properties of Massive Green Valley Galaxies at $0.5 < z < 2.5$.
- Undergraduate Summer Researcher** *July 2020 - Sept 2020*
University of Bath, U.K. (with Prof. Stijn Wuyts)
Collaborative Project: Cold Gas Properties in Nearby 10k Galaxies in MaNGA survey.
- Undergraduate Researcher** *July 2018 - June 2020*
University of Science and Technology of China (with Prof. Xu Kong and Dr. Zhixiong Liang)
Lead Project: The IRX- β Relation of HII Regions in Galaxy M33

TEACHING EXPERIENCE

- Professional Development Program (PDP), UC Santa Cruz** *Apr 2024 - Dec 2024*
Institute for Scientist and Engineer Educators (ISEE)
Independently designed and implemented an optical physics lab for college students.
Location: Las Positas College, Livermore, CA.
90-hour development program focused on inclusive STEM teaching and curriculum design.
- Teaching Assistant, University of California, Riverside**
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|---|---------------------------------|
| PHYS 037 — The Origins (Instructor: Bahram Mobasher) | <i>Fall 2025</i> |
| PHYS 006 — The Violent Universe (Instructor: Gabriela Canalizo) | <i>Winter 2025</i> |
| PHYS 018 — Energy and the Environment (Instructor: Brian Siana) | <i>Fall 2024</i> |
| PHYS 020 — Exploring the Universe (Instructor: Laura Sales) | <i>Spring 2024, Spring 2025</i> |
| General Physics Labs & Discussion | <i>2021 - 2025</i> |
| PHYS 2LA, 2LB, 2LC, 40A, 40B, 40C | |
- Teaching Assistant, University of Science and Technology of China** *Feb - June 2020*
General Physics Lab - Waves, Vibrations, and Sound

APPROVED PROPOSAL AS CO-I.

JWST Cycle 2 (GO 2913)

Dissecting the Monsters: Resolved IFU Spectroscopy of the Most Massive Quiescent Galaxies at $z > 3$, 19.4 hours (PI: Forrest, B.)

ALMA Cycle 8 (2021.1.00501.S)

Do Truly Quiescent Massive Galaxies Exist at $3 < z < 4$?, 19.7 hours. (PI: Forrest, B.)

W. M. Keck 2023B (U085), 2022B (U021)

Do Super-Ultramassive Galaxies Exist at $3 < z < 4$? (PI: Wilson, G.)

OBSERVATIONAL EXPERIENCE

Keck I Telescopes MOSFIRE

10 nights, 2021-2025

Lick Observatory

Oct 14-18, 2021

Muench-Woltjer Observational Astronomy Workshop

TALKS AND PRESENTATIONS

Invited Talk, The 247th AAS Press Conference, Phoenix, Arizona

Jan 2026

Poster, The 247th AAS meeting, Phoenix, Arizona

Jan 2026

Poster, Keck Science Meeting, UCLA, CA

Sept 2025

Dusty or Dead? Far-Infrared Insights on the Nature of Ultramassive Galaxies

Talk, Keck Science Meeting, Berkeley, CA

Sept 2023

The Role of AGN and Gas Depletion in the Quenching of Ultramassive Galaxies at $z \sim 3$

Talk, Physics & Astronomy Student Seminar (PASS), UCR

Mar 2023

Talk, Astro Jamboree, UCR

Oct 2022

TECHNICAL STRENGTHS

Computer Languages

C/C++, Python, IDL, bash, Linux

Software & Tools

CASA, IRAF, SExtractor, MATLAB, Mathematica, L^AT_EX

SED Modelling

CIGALE, MAGPHYS, EAZY, BAGPIPES

Languages

English, Mandarin Chinese

OUTREACH

Volunteer, the 10th Anniversary of the Sand to Snow National Monument anniversary, CA

Mar 2026

Judge, Riverside Unified School District (RUSD)'s Annual Science & Engineering Fair, CA

Jan 2026

Judge, AAS 247 Meeting Chambliss Student Award, Phoenix, AZ

Jan 2026

Volunteer, Planetary Alignment Telescope Night, UCR

Mar 2025

Volunteer, Solar Viewing, UCR

Jan 2025

WORKSHOPS

AAS 247 Peer-Review Workshop (Phoenix, AZ)

Jan 2026

Professional Development Program (ISEE, UCSC)

Apr-Dec 2024

ALMA Proposal Workshop, Caltech

Apr 2023

Lick Observatory Muench-Woltjer Workshop, Mt. Hamilton

Oct 2021

Internship, Purple Mountain Observatory, Nanjing

Dec 2019

Internship, Shanghai Astronomical Observatory, Shanghai

Jan 2019

Future Physicist Summer Camp, USTC

July 2018

GRANTS & AWARDS

Dissertation Completion Fellowship Award (DCFA), UCR

2026 Winter, Spring

The Graduate Student Association (GSA) Travel Grants, UCR

2023, 2025, 2026

Outstanding 1st Graduate Student (Benjamin C. Shen Memorial Award), UCR

June 2021

Dean's Distinguished Fellowship, UCR

2020-2021

Outstanding Undergraduate Thesis, USTC
Outstanding Undergraduate Student Award, USTC
Undergraduate Summer Research Award, USTC
Undergraduate Science Research Project Grant, USTC

June 2020
Sept 2019
2019
2018-2020

REFERENCES

Prof. Gillian Wilson, University of California, Merced *PhD Advisor*
Email: gwilson@ucmerced.edu
Prof. Gabriela Canalizo, University of California, Riverside *PhD Co-Advisor*
Email: gabyc@ucr.edu
Prof. Allison Noble, Arizona State University *Collaborator*
Email: anoble5@asu.edu
Prof. Xu Kong, University of Science and Technology of China *Undergraduate Advisor*
Email: xkong@ustc.edu.cn

PUBLICATIONS

Chang, W., Wilson, G., Forrest, B., Muzzin, A., et al., anticipated submission to ApJ, *Statistical Far-Infrared Analysis of a Large Sample of Ultramassive Galaxies at $z > 3$* .

Chang, W.*, Wilson, G., Forrest, B., et al. 2026, arXiv:2601.22844, submitted to ApJ, under revision, *MAGAZ3NE: Dust Deficiency in Ultramassive Quiescent Galaxies at $3 < z < 4$ with ALMA Observation*.

Chang, W.*, Wilson, G., Forrest, B., et al. 2026, ApJ, 1001, 131, *MAGAZ3NE: Far-IR and Radio Insights into the Nature and Properties of Ultramassive Galaxies at $z \gtrsim 3$* .

Chang, W.*, Fang, G., et al. 2022, ApJ, 936, 47, *The Physical Properties of Massive Green Valley Galaxies as a Function of Environment at $0.5 < z < 2.5$ in 3D-HST/CANDELS Fields*.

Forrest, B. (*incl. Chang, W.*) et al. 2025, arXiv:2508.10987, accepted by Nature Astronomy, *A Massive, Evolved Slow-Rotating Galaxy in the Early Universe*.

McConachie, I. (*incl. Chang, W.*) et al. 2025, arXiv:2508.05752, accepted by ApJ, *Excavating The Ruins: An Ancient $z=2.675$ Galaxy Which Formed in the First 500 Myr*.

McConachie, I. (*incl. Chang, W.*) et al. 2025, ApJ, 978, 17, *MAGAZ3NE: Evidence for Galactic Conformity in $z > 3$ Protoclusters*.

Forrest, B. (*incl. Chang, W.*) et al. 2024, ApJ, 971, 169, *Environmental Effects on the Stellar Mass Function in a $z \sim 3.3$ Overdensity of Galaxies in the COSMOS Field*.

Forrest, B. (*incl. Chang, W.*) et al. 2024, ApJ, 977, 51, *MAGAZ3NE: Massive, Extremely Dusty Galaxies at $z \sim 2$ Lead to Photometric Overestimation of the Most Massive Galaxies at $3 < z < 4$* .

Stawinski, S. (*incl. Chang, W.*) et al. 2024, The Open Journal of Astrophysics 7 (June), *Spectroscopic Confirmation of an Ultra-Massive Galaxy in a Protocluster at $z \sim 4.9$* .

Forrest, B. (*incl. Chang, W.*) et al. 2023, MNRAS, 526, L56–L62, *Elentari: A Massive Proto-Supercluster at $z \sim 3.3$ in the COSMOS Field*.

Forrest, B. (*incl. Chang, W.*) et al. 2022, ApJ, 938, 109, *MAGAZ3NE: High Stellar Velocity Dispersions for Ultra-Massive Quiescent Galaxies at $z > 3$* .

Avery, C. R. (*incl. Chang, W.*) et al. 2021, MNRAS, 503, 5134–5160, *Incidence, Scaling Relations, and Physical Conditions of Ionized Gas Outflows in MaNGA*.