

Prof. Yuanyuan Su – Resume

Professional Experience

Associate Professor at University of Kentucky
2024 – present
Assistant Professor at University of Kentucky
2019 – 2024 (**maternity leave in 2021**)
Postdoctoral Fellow at Center for Astrophysics | Harvard-Smithsonian
2015 – 2018 (**maternity leave in 2018**)
Postdoctoral Scholar at University of California, Irvine
2013 – 2015

Education

Ph.D. Astrophysics, December 2013 University of Alabama, Tuscaloosa, AL, USA
B.Sc. Physics, June 2007 Sichuan University, Chengdu, Sichuan, China

Languages

English, Mandarin (native), Japanese (JLPT-N2)

Career Highlight

2024 American Astronomy Society High Energy Astrophysics Division Early Career Prize “*For innovative contributions and leadership in the analysis of galaxy groups and clusters, which have advanced our understanding of baryon physics on the largest cosmic scales*”

Accumulated PI Grants

NASA – \$292,798
SAO – \$487,834
NRAO – \$75,000
NSF – \$278,074
Awards/Honors – \$42,000

PI Proposals

2024 **XMM-Newton** AO 24 –**81 ksec** – GAMA Group-83
2024 **VLA** – **25.5 hours** – SDSS-C4 3028
2024 **Chandra** AO 26 –**120 ksec** – protocluster 120BOSS1348
2023 **IRAM** – 30 meter (WSW)–**12 hours**–Abell 1142
2022 **IRAM** – 30 meter (OTF)–**11 hours**–Abell 1142
2022 **XMM-Newton** AO 22 –**77 ksec** – Abell 168 N
2021 **NSF** – AAG “A Systematic and Comprehensive Study of Black Hole-Driven Turbulence in Massive Galactic Systems”
2020 **XMM-Newton** AO 20 –**53 ksec** – SDSS-C4 3028
2020 **Chandra** AO 22 –**55 ksec** – Virgo S11
2020 **Chandra** AO 22 –**171 ksec** – Antlia cluster
2019 **XMM-Newton** AO 19 –**102 ksec** – Virgo CF S, SW, and W
2018 **XMM-Newton** AO 18 –**48 ksec** – NGC 3258, NGC 3258-SW
2018 **VLA** –**14.50 hours** – NGC 4477
2018 **HISAKI** –**200 ksec** – NGC 5044 and Abell 2597
2017 **Chandra** AO 19 – Archival proposal “A Systematic Study of Kelvin-Helmholtz Instability in Galaxy Clusters”
2017 **Chandra** AO 19 –**45 ksec** – MKW4
2015 **XMM-Newton** AO 15 – **183 ksec** – Abell 1142
2015 **XMM-Newton** AO 15 – **73 ksec** – NGC 4342

2015 **Chandra** AO 17 – **200 ksec** – Abell 586
 2015 **Suzaku** AO 10 – **100 ksec** – NGC 4342
 2015 **Suzaku** AO 10 – **100 ksec** – Abell 586
 2014 **Chandra** AO 16 – **10 ksec** – ESO3060170-S
 2014 **Suzaku** AO 9 – **200 ksec** – RXJ1159+5531-E, RXJ1159-5531-W
 2014 **Suzaku** AO 9 – **200 ksec** – ESO3060170-E, ESO3060170-W
 2014 **Suzaku** AO 9 – **100 ksec** – MKW4-WN
 2013 **XMM-Newton** AO 13 – **196 ksec** – ESO3060170-S, ESO3060170-E
 2013 **Suzaku** AO 8 – **230 ksec** – MKW4, MKW4-N2, MKW4-W2
 2011 **XMM-Newton** AO 11 – **90 ksec** – NGC 3608, NGC 5982
 2011 **Chandra** AO 13 – **55 ksec** (Chandra), **30 ksec** (XMM-Newton, joint)
 –NGC 1400, NGC 1407-E
 2011 **Suzaku** AO 6 – **100 ksec** – NGC 1407/1400
 2010 **Suzaku** AO 5 – **110 ksec** – ESO3060170, ESO3060170-S

Proposals awarded to students I supervised and administrated at UKy

2024 **XMM-Newton** AO 24 –**25 ksec** – NGC2418 (PI: Ryan Eskenasy)
 2024 **XMM-Newton** AO 24 – **140 ksec** – WBL186, WHL J162257.3+2, WHL
 J094322.9+2, SDSS-C4 3028 (PI: Shweta Jain)
 2024 **Chandra** AO 26 –**28 ksec** – NGC4684 (PI: Ryan Eskenasy)
 2024 **IRAM** – 30 meter (WSW) – **15.5 hours** – SDSS-C4 3028 (PI: Shweta Jain)
 2021 **Chandra** AO 23 –**60 ksec** – Abell 262 (PI: Arnab Sarkar)

**Selected Press
Release**

High-Energy Astrophysics Division Announces 2024 Award Winners (**HEAD**)
 Warm gas in the core of a galaxy cluster? – the first astrophysical results by
 Spectroscopic Planetary Observatory “HISAKI”(JAXA)
 Galaxy Cluster Travels Down an Intergalactic Highway (**Chandra X-ray**
 observatory)
 Women in Astronomy: Advice for Students (**Astrobites**)
 Black Hole Activity Is Not Evolving in Central Cluster Galaxies (**NEWSWISE,**
AAS briefing)
 Discovery of a Pre-merger Shock Wave in Abell 98: A Missing Piece in Building
 the Most Massive Structures in Our Universe (**NEWSWISE, AAS** briefing)

**Teaching
experience**

2024 PHY160: Physics and Astronomy for School Teachers
 2022 AST310: Topics in Astronomy and Astrophysics
 2021,2023 PHY600: Machine Learning And Data Science In Physics And
 Astronomy
 2020 AST192: Stars, Galaxies And The Universe
 2019 AST191: The Solar System