

# WUJI WANG

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## EDUCATION & RESEARCH

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- **PhD, Astrophysics, Heidelberg University/IMPRS-HD, DE**

Oct. 2020 –

**Thesis:** *Mapping the circum-galactic medium around high-redshift radio galaxies in 3D*

**Supervisors:** Dominika Wylezalek, Joël Vernet, Carlos De Breuck

- **MSc, Astrophysics, Ludwig Maximilian University of Munich/ESO, DE**

Apr. 2018 – Jul. 2020

**Thesis:** *MUSE View of the CGM around a  $z \sim 4.5$  Radio Galaxy*

**Supervisors:** Dominika Wylezalek, Joël Vernet, Carlos De Breuck, Benjamin Moster

**Grade:** 1.26 – German system

- **BSc, Astronomy, Nanjing University, CN**

Sep. 2013 – Jul. 2017

**Thesis:** *Investigating the high-redshift tidal disruption event candidate in the CDF-S*

**Supervisor:** Bin Luo

**Grade:** 4.38/5

- **Summer Intern, ESO, DE**

Jun. 2016 – Aug. 2016

**Project:** *Research on White Dwarfs Polluted by Planetary Debris*

**Supervisor:** Siyi Xu

## AWARDED TELESCOPE TIME

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- **UVES/VLT P108:**

Spectrally Resolving the Complex CGM of High-redshift Radio-loud AGN using UVES, Program ID:108.21WL.001 (20h), PI

- **JWST NIRSpec/IFU Cycle1:**

Zooming into the Monster's Mouth: Tracing Feedback from Their Hosts to Circumgalactic Medium in  $z = 3.5$  Radio-loud AGN, Program ID:1970 (24.5h), PI

- **ALMA Band8 Cycle8:**

Pushing the frontier with ALMA: star formation at sub-kpc scale in distant radio-loud AGN hosts, Program ID: 2021.1.00576.S (13.9h), PI

- **NOEMA 2023:**

Weak outflows in quenching active galaxies - How does the molecular gas respond?, Program ID: S23BT (30h), Co-I

## PUBLICATIONS

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### First author

- **Wang, W.**, Wylezalek, D., De Breuck C., Vernet J., Humphrey, A., Villar Martín, M., Lehnert, M., and Kolwa S. (2021) [Mapping the "invisible" circumgalactic medium around a  \$z \sim 4.5\$  radio galaxy with MUSE](#), *Astronomy and Astrophysics*, 654, A88
- **Wang, W.**, Wylezalek, D., Vernet J., De Breuck C., Gullberg, B., Swinbank, M., Villar Martín, M., Lehnert, M., Drouart, G., Arrigoni Battaia F., Humphrey, A., Noirot, G., Kolwa S., Seymour N., and Lagos, P. (2023) [3D tomography of the giant intrinsic Ly \$\alpha\$  nebulae of  \$z \approx 3-5\$  radio-loud AGN](#), submitted

### Co-author

- Zhang, S., ..., **Wang, W.**, ... (2023) Revealing the Gas Recycling in the Circumgalactic Medium (CGM) Utilizing a Luminous Ly $\alpha$  nebula around a Type-II Quasar at  $z = 2.6$  with the Keck Cosmic Web Imager (KCWI), ApJ accepted

- Bertemes, C., ..., and **Wang, W.** (2023) [MASCOT: Molecular gas depletion times and metallicity gradients – evidence for feedback in quenching active galaxies](#), MNRAS, 518, 5500
- Wylezalek, D., ..., **Wang, W.**, ... (2022) [MASCOT – An ESO-ARO legacy survey of molecular gas in nearby SDSS-MaNGA galaxies: I. first data release, and global and resolved relations between H<sub>2</sub> and stellar content](#), MNRAS, 510, 3119
- Falkendal, T., ..., and **Wang, W.** (2021) [ALMA and MUSE observations reveal a quiescent multi-phase circumgalactic medium around the  \$z \sim 3.6\$  radio galaxy 4C 19.71](#), A&A, 645, A120

## TALKS & MEDIA

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### Media

- Apr. 20th 2021, [ZAH Press release](#)
- Aug. 1st 2021, [UNI SPIEGEL](#)

### Invited talks

- Jun. 30th 2021, Group meeting talk at Tsinghua High-z Team, online
- Oct. 2023, The importance of jet-induced feedback on galaxy scales, NL

### Conferences & seminars

- Jun. 17th 2021, ARI Institute Colloquium, Seminar talk, DE
- Jun. 28th – July.2nd 2021, EAS 2021, ePoster, online
- Nov. 3rd 2021, 1st KooGiG-Junior, Conference talk, online
- Jan. 26th 2022, [Quasars and Galaxies through Cosmic Time](#), Conference talk, online
- Jan. 27th 2022, MPIA Galaxy Coffee, Seminar talk, DE
- Sep. 12th – 16th 2022, What matter(s) around galaxies 2022, Conference talk, IT
- Sep. 26th – 30th 2022, What drives the growth of black holes, Poster, IS
- Dec. 1st 2022, ARI Institute Colloquium, Seminar talk, DE
- Feb. 23rd 2023, MPIA Galaxy Coffee, Seminar talk, DE
- Jul. 10th – 14th 2023, EAS 2023, Contributed talk, PL

## TEACHING & MENTORING

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- Mar. –Jul. 2021: Galactic and Extragalactic Astronomy (MVastro3), Heidelberg University, tutor
- Mar. –Jul. 2021: BSc Thesis – Chuanming Mao, Heidelberg University, co-advise
- Oct. 2021 – Jun. 2022: CCD photometry in modern astronomy (FP30), Heidelberg University, tutor
- Oct. 2022 – Jun. 2023 : BSc Project & Thesis – Yu-Ruei Wang, Heidelberg University, co-advise

## ADDITIONAL INFORMATION

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- Native speaker of Mandarin Chinese; Fluent in English (TOEFL 106/120); Basic German
- Proficient in Python, Linux/Mac OS programming; Experienced in MUSE/JWST NIRSpec IFU data reduction and IFU/spectroscopical type data analysis

## OUTREACH

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- Oct. 24-25th 2017, Beijing, Gave a talk of introductory astronomy to high school students of a science camp and lead their visit to Beijing Planetarium