Name: Weiwei Xu (徐伟伟)
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Institution: National Astronomical Observatories, Chinese Academy of Sciences (NAOC)

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Address: 20A Datun Road, Chaoyang District, 100101, Beijing, China

EDUCATION AND JOB:

• May 2022 - Now: Assistant researcher,

NAOC, Beijing, China. Collaborator: Prof. Ran Li

May 2019 - Apr 2022: Post-doc

Kavli Institute for Astronomy and Astrophysics (KIAA), Peking University,

Beijing, China. *Collaborated advisor:* Prof. Linhua Jiang

• Jul. 2016 - Nov. 2018: visiting PhD student,

the Argelander-Institut für Astronomie (AIfA), University of Bonn,

Bonn, Germany. Supervisor: Prof. Thomas Reiprich

• Sep. 2014 - Jan. 2019: PhD in astrophysics,

NAOC, Beijing, China. Supervisor: Prof. Lijun Gou

• Sep. 2011 - Jun. 2014: Master in Astrophysics,

NAOC, Beijing, China. Supervisor: Prof. Jinlin Han

• Sep. 2007 - Jun. 2011: Bachelor in applied physics, Shandong University, Weihai, China

RESEARCH INTEREST:

• galaxy, galaxy clusters and cosmology, weak lensing, optical observation, X-ray astronomy

ACADEMIC SERVICE:

- Reviewed for Journal: Astronomy & Astrophysics (A&A)
- Reviewed for Chandra observation proposal

RESEARCH FUNDING:

 NSFC young scientist program, 300k RMB, PI, 2022-2025, "the identification of very extended galaxy clusters with XMM-COSMOS and CDF-S data"

ACADEMIC PUBLICATION:

- As of Mar. 2025, 13 published papers in total, 146 citations.
- Published papers as first author:
 - 1. XMM-SERVS X-ray eXtended Galaxy Cluster (XVXGC) catalog (**Xu, W.,** Jiang L., et al., 2024, a&a, 691, A300)
 - 2. The Measurement of the Splash-back Radius of Dark Matter Halos (**Xu, W.,** Shan, H., et al. 2024, apj, 971, 157)
 - 3. Catalog of X-ray-selected extended galaxy clusters from the ROSAT All-Sky Survey (RXGCC) (**Xu, W.,** et al., 2022, a&a, 658, A59)
 - 4. Halo Mass-Concentration Relation at High-Mass End (Xu, W., et al. 2021, apj, 922, 162)
 - 5. A New X-ray Selected Sample of Very Extended Galaxy Groups from the ROSAT All-Sky Survey (**Xu, W.**, Ramos-Ceja, M. E., et al. 2018, a&a, a162, 17)
 - 6. X-ray fluorescent lines from the Compton-thick AGN in M51 (**Xu, W.,** Liu, Z., et al. 2016, mnras, 455, L26)
 - 7. An efficient method to identify galaxy clusters by using SuperCOSMOS, 2MASS and

WISE data (**Xu, W.**, Wen, Z., et al. 2014, Science China Physics, Mechanics, and Astronomy, 57, 2168)

• Published papers as co-author:

- A. Assessing mass-loss and stellar-to-halo mass ratio of satellite galaxies: a galaxy-galaxy lensing approach utilizing DECaLS DR8 data (Wang C., Li R., Shan H., **Xu W.**, Yao J., Jing Y., Gao L., et al., 2024, mnras, 528, 2728)
- B. MaNGA DynPop IV. Stacked total density profile of galaxy groups and clusters from combining dynamical models of integral-field stellar kinematics and galaxy-galaxy lensing (Wang C., Li R., Zhu K., Shan H., **Xu W.**, Cappellari M., Gao L., et al., 2024, mnras, 527, 1580)
- C. Spectroscopic Confirmation of Two X-Ray Diffuse and Massive Galaxy Clusters at Low Redshift (Chen, K., **Xu, W.,** & Jiang, L. 2022, apj, 940, 79)
- D. Ram Pressure Stripping of HI-rich Galaxies Infalling into Massive Clusters (Wang, J., **Xu**, **W**_•, et al. 2020, apj, 903(2):103
- E. The clumpy torus around type II AGN as revealed by X-ray fluorescent lines (Liu, J., Liu, Y., [...] **Xu, W.**, et al. 2016, mnras, 459, L100)
- F. The Spin of The Black Hole in the X-ray Binary Nova Muscae 1991 (Chen, Z., Gou, L., [...] **Xu, W.**, et al. 2016, apj, 825, 45)

OBSERVATION PROPOSALS:

- AstroSat AO-12, 119ksec, ID: A10-065, observed, 2021, PI
- XMM-Newton AO-19, 60ksec, ID:86388, observed, 2019, Co-I

SELECTED TALKS:

- eROSITA & HUBS Scientific Exploitation Workshop 2024, Mar. 2024, 20min talk, "Detection of X-ray extended clusters & Research of dark matter halos"
- NAOC workshop of physics of galaxy clusters, July 2024, 45min talk of "X-ray galaxy clusters with low surface-brightness profile"
- Tsinghua DOA lunch talk, Nov. 2024, 40min talk, "The research of dark matter halo with galaxy-galaxy lensing method"
- Xtalk online seminars, Dec. 2024, 40min talk, "Detection of X-ray extended galaxy clusters with ROSAT and XMM-Newton data"
- The KooGiG-Junior forum (KIAA Forum on Gas in Galaxies for Early Career Scientists), online, Nov. 2021, talk (15min)
- 2020 Jing-Guang-Xia Astrophysics Meeting, Xiamen, Dec. 2020 (10min)
- Annual Meeting of Chinese Astronomical Society, Delingha, Oct. 2019 (15min)
- KIAA lunch talk, Dec. 2018, talk (45min)
- German eROSITA Consortium meeting, Ringberg, Oct. 2018, talk (15+5 min)
- NAOC Seminar, Dec. 2017, talk (45+15 min)
- NJU Seminar, Dec. 2017, talk (45+15 min)

TUTORIALS:

- X-ray astronomy, Uni-Bonn, 2018
- high-energy astrophysics, NAOC, 2015
- high-energy astrophysics, PKU, 2015

HONORS AND AWARDS:

• 2016, National scholarship of China

- 2016, CAS-DAAD scholarship
- 2014/2015, NAOC-AMD scholarship
- Outstanding member of student union at College and Graduate school
- 2010, NAOC Scholarships
- 2009, National Encouragement scholarship
- 2007-2011, First scholarship three times and Second one for four times in Shandong University at Weihai