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Address: 北京市朝阳区大屯路甲20号,国家天文台

教育与工作经历:

• 2022.05 - 至今: 中国科学院国家天文台, 助理研究员 合作导师: 李然研究员

• 2019.05 - 2022.04: 北京大学科维理天文与天体物理研究所,博士后 合作导师: 江林华研究员

• 2016.07 - 2018.11: 德国波恩大学阿格兰德天文研究所,访问研究生导师: Thomas Reiprich教授

2014.09 - 2019.01: 中国科学院国家天文台,博士研究生导师: 苟利军研究员

2011.09 - 2014.06: 中国科学院国家天文台,硕士研究生导师: 韩金林研究员

• 2007.09 - 2011.06: 山东大学威海分校,应用物理学,学士

研究兴趣:

• 星系, 星系团与宇宙学, 引力透镜, 光学观测, X射线观测

科研经费:

- 国家自然科学基金-青年科学基金项目,30万,项目负责人,2022-2025年,项目名称:利用XMM-COSMOS与CDF-S数据搜寻延展星系团
- 国家自然科学基金-面上项目,60万,项目负责人,2025年3月提交,项目名称:X射 线延展星系团的证认及系统研究

学术服务:

- 担任Astronomy & Astrophysics (A&A)杂志审稿人
- 担任Chandra望远镜观测申请审稿人

学术论文发表: PUBLICATION:

• 截止2025年3月,已经正式发表学术论文13篇,总引用146次。

已发表7篇一作、6篇合作文章;

- 一篇通讯作者、一篇合作文章正在一审中;
- 二篇一作、二篇合作文章即将投稿。
- 已发表一作文章列表:
- 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)

• 已发表合作文章列表:

- 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)

• 在审稿中、将投稿文章列表:

- Mass comparison of massive halos: Insights from redMaPPer clusters, DESI Groups, and Lensing Methods (Chen X., **Xu W.***, Li R., 投稿至ApJ, 一审中)
 *: corresponding author
- XMM-Newton follow-up of a sample of apparent low surface brightness galaxy groups detected in the ROSAT All-Sky Survey (Spinelli C., Veronica A., Pacaud F., Reiprich T.H., Migkas K., **Xu W.** and Ramos-Ceja M. E., 投稿至A&A, 一审中)
- X-ray cosmic shear cross-correlations: detection and constraints on baryonic effects (**Xu W.**, Li R., Shan H., Yao J., 即将投稿至ApJ)
- The prediction of CSST performance on the profile of dark matter halos (**Xu W.,** Li R., Shan H., Yao J., 即将投稿至RAA)
- Mock Observations for the CSST Mission: Multi-Channel Imager The Cluster Field (Xie Y., ..., Xu W., ..., ,即将投稿至RAA)
- A catalogue of 3363 galaxy clusters derived from XMM-Newton X-ray images (Yuan Z., Wen Z., Xu W. & Han J., 即将投稿至A&A)

观测申请:

- AstroSat AO-12, 119ksec, ID: A10-065, 2021年, 已获批并已观测, 负责人
- AstroSat AO-10, 48.5ksec, ID: A10-065, 2019年,已获批并已观测,负责人
- XMM-Newton AO-19, 60ksec, ID:86388, 2019年,已获批并已观测,合作者
- Chandra Cycle-27, 50ksec, ID:27800303, 2025年3月, 已提交, 负责人
- TAP CFHT K1 Observing Proposal, 4.0hr, ID: K1-04-00085, 2025年3月,已提交,负

责人

• Einstein Probe - FXT observing Proposal, 60ksec, ID: Cycle2-0045, 2025年4月,已提交,负责人

会议报告及展板:

- "eROSITA & HUBS Scientific Exploitation Workshop 2024", Mar. 2024, 20min talk, "Detection of X-ray extended clusters & Research of dark matter halos"
- "The NAOC workshop of physics of galaxy clusters", July 2024, 45min talk of "X-ray galaxy clusters with low surface-brightness profile"
- CSST scientific data system and scientific team 2024 seminar, Oct. 2024, 15min, "The prediction of galaxy-galaxy lensing of dark matter halos"
- Academic seminar on the evolution of galaxies and cosmological research of the CSST, Nov. 2024, highlight talk of sub-topic 3, "The measurement of galaxy-galaxy lensing and prediction of CSST performance"
- 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 2nd HUBS workshop, Xiamen, Apr. 2022, talk (15min)
- The KooGiG-Junior forum (KIAA Forum on Gas in Galaxies for Early Career Scientists), online, Nov. 2021, talk (15min)
- ACAMAR7 (Australia-China Workshop on Astrophysics), Nov. 2021, poster + 3min video
- 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)
- German eROSITA Consortium meeting, Garching, Apr. 2018, talk (15+5 min)
- German eROSITA Consortium meeting, Hamburg, Jul. 2017, talk (15+5 min)
- NAOC Seminar, Dec. 2017, talk (45+15 min)
- NJU Seminar, Dec. 2017, talk (45+15 min)
- geco-lam2017 : Galaxy Clusters Across Cosmic Time, Aix en Provence, France, Jul. 2017, poster and introduction in 1min
- Bonn-Cologne Graduate School of Physics and Astronomy (BCGS) poster section, Bonn, poster to physics students (1 min)

助教经历:

- X射线天文学, 德国波恩大学, 2018年
- 高能天体物理,中国科学院国家天文台,2015年
- 高能天体物理,北京大学, 2015年

获奖与荣誉:

- 2016年,博士研究生国家奖学金
- 2016年, CAS-DAAD联合奖学金
- 2014年、2015年, NAOC-AMD联合奖学金
- 2015年,国家天文台研究生会优秀学生干部
- 2010年,国家天文台奖学金

- 2009年,国家励志奖学金
- 2007-2011年,山东大学威海分校,一等奖学金3次,二等奖学金4次