

Yang Yang

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Xiangtan University
Xiangtan, Hunan, P. R. China
☎ (+86)13057613230
✉ yangyang.astro@gmail.com
🌐 yangyangnju.github.io

Employment

- 2025–present **Xiangtan University**, Xiangtan, Hunan, China
- 2022–2025 **Postdoctoral Researcher**, *Purple Mountain Observatory, Chinese Academy of Sciences*, Nanjing, China
Contact: Dr. Jiang-tao Li
- 2021–2022 **Postdoctoral Researcher**, *Nanjing University*, Nanjing, China
Contact: Dr. Zhinyuan Li
- 2017–2021 **Postdoctoral Researcher**, *Shanghai Astronomical Observatory*, Shanghai, China
Contact: Dr. Zhiqiang Shen

Education

- 2010–2017 **Ph.D. in Astrophysics**, *School of Astronomy & Space Science*, Nanjing University
Thesis: A Radio Study of Nearby Low-luminosity Active Galactic Nuclei with Interferometric Observations, Advisor: Dr. Zhiyuan Li

Other Research Experience

- 2014 **Visiting Research Student**, *Queen's University*, Kingston, Canada
Contact: Judith Irwin
- 2011 **Visiting Research Student**, *National Radio Astronomy Observatory*, Socorro, NM
Contact: Sjouwerman, Loránt O.

Participated Large Proposals

- 2014–Present **CHANG-ES (Continuum Halos of Nearby Galaxies – an EVLA Suvery)**, *PI: Judith Irwin*, Queen's University, Kingston, Canada

Research Interests

AGN feedback, Nearby galaxies, Radio jet, Magnetic field, Neutral H I gas, Circumgalactic medium, High-redshift quasar.

Funding as PI

- 2023 National Science Fund for Young Scholars (CNY: 300,000)
- 2019 Shanghai Sailing Program (CNY: 200,000)

Accepted Observing Proposals

Date	Facility	Time	proposal
2025	GBT	38 hrs	LOW SURFACE BRIGHTNESS NEUTRAL HI GAS CONTENT OF HIMALAYA GALAXIES (PI)
2023	VLA	30 hrs	Molecular gas in galaxies anchored by CIV absorbers in HE II reionization epoch (PI)
2023	VLA	6 hrs	Radio emission from a microquasar candidate (PI)
2023	VLA	6.5 hrs	Are bubbles blowing out along the galaxies disk in NGCX (PI)
2023	VLA	112 hrs	Extended HI Disk Around Massive Spiral Galaxies (PI)
2023	eMERLIN	24 hrs	Searching for the radio emission from the nucleus of M31 with e-MERLIN
2022	VLA	22 hrs	Completion of CHANG-ES S-band
2022	VLA	8 hrs	The Nuclear Bubble of the Virgo Cluster Galaxy NGC 4438
2022	VLA	6 hrs	Exploring the Radio Emission from M31*
2022	JCMT	2.1 hrs	Pilot study of the star formation activity in CHANG-ES galaxies via a high-J CO line
2021	FAST	30 hrs	Deep Mapping of Diffuse HI in M86 group (PI)
2020	VLA	6 hrs	Exploring a radio outflow from the quiescent supermassive black hole in M32
2017	TMRT	8 hr	Class I methanol maser observation with Tianma 65m Radio telescope in Q band (co-PI)
2016	VLBI	20 hrs	Dissecting the compact radio emission from the nucleus of M31 with VLBA
2015	VLA	28 hrs	high-resolution follow-up study of radio jets in CHANG-ES galaxies (PI)

Skill

- Familiar with Python programming skills, including data analysis and visualization
- Proficient in Linux and macOS operating systems.
- Experienced in shell scripting and system administration in Linux environment. Experienced in setting up and maintaining Linux server for team-based work environment and data security.
- Experience with IDL programming language for scientific data analysis.
- Proficient in astronomy data reduction and analysis software: CASA, CARTA, and ds9.

Publications

Refereed Publications

Publications at ADS: <https://ui.adsabs.harvard.edu/public-libraries/2VuJvgLBQSOiqPquXY8b9g>

- Xu, Jianghui; **Yang, Yang**; Li, Jiang-Tao; Liu, Guilin; Irwin, Judith; Dettmar, Ralf-Jürgen; Stein, Michael; Wiegert, Theresa; Wang, Q. Daniel; English, Jayanne, *CHANG-ES. XXXV. Cosmic Ray Transport and Magnetic Field Structure of NGC 3556 at 3 GHz*. 2025, ApJ, 978, 5.
- Li, Jiang-Tao; Yu, Xiaodi; Mao, Huiyang et al., (**Yang Yang** is co-author), *Probing the He II re-ionization ERA via Absorbing C IV Historical Yield (HIERACHY) II: Project Design, Current Status, and Examples of Initial Data Products*. 2025, ApJ accepted.

- 15 Li-Yuan. Lu, Jiang-Tao. Li, Carlos J. Vargas, et al., (**Yang Yang** is co-author), *eDIG-CHANGES III: the lagging eDIG revealed by multi-slit spectroscopy of NGC 891*. 2024, *A&A* 691, A217.
- 14 V. Heesen, T. Wiegert, J. Irwin, et al., (**Yang Yang** is co-author), *CHANG-ES XXXIV: a 20 kpc radio bubble in the halo of the star-forming galaxy NGC4217*. 2024, *A&A* 691, A273.
- 13 Judith Irwin, Rainer Beck, Tanden Cook, et al., (**Yang Yang** is co-author), *CHANG-ES XXXI—A Decade of CHANG-ES: What We Have Learned from Radio Observations of Edge-on Galaxies*. *Galaxies*. 2024, 12, 22. <https://doi.org/10.3390/galaxies12030022>
- 12 Jiang-Tao Li, Li-Yuan Lu, Zhijie Qu, Robert A. Benjamin, Joel N. Bregman, Ralf-Jurgen Dettmar, Jayanne English, Taotao Fang, Judith A. Irwin, Yan Jiang, Hui Li, Guilin Liu, Paul Martini, Richard J. Rand, Yelena Stein, Andrew W. Strong, Carlos J. Vargas, Q. Daniel Wang, Jing Wang, Theresa Wiegert, Jianghui Xu, and **Yang Yang**, *eDIG-CHANGES II: Project Design and Initial Results on NGC 3556*. 2024, *ApJ*, 967, 78.
- 11 Jiang-Tao Li, Wei Sun, Li Ji, **Yang Yang**, *Pressure Balance and Energy Budget of the Nuclear Superbubble of NGC 3079*. 2024, accepted for publication in *ApJ*, arXiv:2404.03879
- 10 **Yang Yang**, Jiang-tao Li, Theresa Wiegert, Zhiyuan Li, Fulai Guo, Judith Irwin, Q. Daniel Wang, Ralf-Juergen Dettmar, Rainer Beck, Jayanne English, Li Ji, *CHANG-ES. XXX. 10 kpc Radio Lobes in The Sombrero Galaxy*. 2024, accepted for publication in *ApJ*, arXiv:2403.16682
- 9 Jiang, Yan; Li, Jiang-Tao; Gao, Yu ; Bregman, Joel N. ; Ji, Li ; Jiang, Xue-Jian; Tan, Qing-Hua; Wang, Jian-Fa; Wang, Q. Daniel; **Yang Yang**, *CO-CHANGES - I. IRAM 30-m CO observations of molecular gas in the sombrero galaxy*. 2024, **MNRAS**, **528**, **4160J**
- 8 Peng, Sijia; Li, Zhiyuan; Sjouwerman, Loránt O.;**Yang Yang**; Jiang, Wu; Shen, Zhi-Qiang, *Searching for Radio Outflows from M31* with VLBI Observations*. 2023, **ApJ**, **953**, **12P**
- 7 Li, J.-T., Wang, Q. D., Wiegert, T., Bregman, Joel N., Beck, Rainer, Damas-Segovia, Ancor, Irwin, Judith A., Ji, Li, Stein, Yelena, Sun, Wei, **Yang Yang**, *CHANG-ES XXIX: the sub-kpc nuclear bubble of NGC 4438*. 2022, **MNRAS**, **515**, **2483L**
- 6 **Yang Yang**, Judith Irwin, Jiangtao Li, Theresa Wiegert, Q. Daniel Wang, Wei Sun, A. Damas-Segovia, Zhiyuan Li, Zhiqiang Shen, Rene A. M. Walterbos, Carlos J. Vargas, *CHANG-ES. XXIV. First Detection of A Radio Nuclear Ring and Potential LLAGN in NGC 5792*. 2022, **ApJ**, **927**, **11P**
- 5 Eric S. Perlman, Eileen T. Meyer, Q. Daniel Wang, Qiang Yuan, Richard Henriksen, Judith Irwin, Jiangtao Li, Theresa Wiegert, Haochuan Li, and **Yang Yang**, *Lightcurve Evolution of the nearest Tidal Disruption Event: A late-time, radio-only flare* . 2021, **ApJ**, **925**, **143P**

- 4 Peng, Sijia; Li, Zhiyuan; Sjouwerman, Loránt O.; **Yang, Yang**; Xie, Fuguo; Yuan, Feng, *Resolving the Nuclear Radio Emission from M32 with the Very Large Array*. 2020, **ApJ**, **894**, **61P**
- 3 Irwin, Judith A.; Henriksen, Richard N.; WeŻgowiec, Marek; Damas-Segovia, Ancor; Wang, Q. Daniel; Krause, Marita; Heald, George; Dettmar, Ralf-Jürgen; Li, Jiang-Tao; Wiegert, Theresa; Stein, Yelena; Braun, Timothy T.; Im, Jisung; Schmidt, Philip; Macdonald, Scott; Miskolczi, Arpad; Merritt, Alison; Mora-Partiarroyo, S. C.; Saikia, D. J.; Sotomayor, Carlos; **Yang, Yang**, *CHANG-ES - XI. Circular polarization in the cores of nearby galaxies*. 2018, **MNRAS**, **474**. **5057**
- 2 **Yang, Yang**; Li, Zhiyuan; Sjouwerman, Loránt O.; Feng Yuan, Zhi-Qiang Shen, *Very Large Array Multiband Monitoring Observations of M31**. 2015, **ApJ**, **845**, **140**
- 1 **Yang, Yang**; Li, Zhiyuan; Sjouwerman, Loránt O.; Wang, Q. Daniel; Gu, Qiusheng; Kraft, Ralph P.; Yuan, Feng, *Detection of a Compact Nuclear Radio Source in the Local Group Elliptical Galaxy M32*. 2015, **ApJL**, **807**, **L19**
in preparation
- 1 **Yang, Yang**, et al., *HIMALAYA. probing the extended HI gas disk of MAssive gaLaxies bY observAtional study*. in preparation
- 2 **Yang, Yang**, CHANG-ES members, et al., *Whether bubbles are blowing out along the galaxy disk in NGC 5084*. to be determined