

QIAN YANG

CONTACT INFORMATION

Harvard-Smithsonian Center for Astrophysics
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WORKING EXPERIENCE

Astrophysicist (Post-Doctoral Research Fellow)

Harvard-Smithsonian Center for Astrophysics

2021.08 - Present

Postdoctoral Research Associate

Department of Astronomy, University of Illinois at Urbana-Champaign

2018.09 - 2021.08

Visiting Research Scholar

Steward Observatory, University of Arizona

2015.09 - 2016.09

EDUCATION

Ph.D, Astrophysics, Peking University

2012.09 - 2018.07

B.S., Physics, Sichuan University

2008.09 - 2012.07

RESEARCH INTERESTS

- Galaxies and their central supermassive black holes
- Quasar variability
- Changing-look quasars
- Quasar target selection and photometric redshift estimation
- Dust reverberation mapping in distant quasars

TECHNICAL EXPERIENCE

Programming	IDL, Python, R
Software	IRAF, SQL, LaTeX, TOPCAT
Astronomical	Optical spectroscopy data reduction and decomposition X-ray data reduction and analysis Imaging reduction and photometry Photometric redshift estimation of quasars and galaxies

OBSERVING EXPERIENCE

Imaging

- Leading an ongoing observing program using DECam to monitor several LSST Deep Drill Fields to bridge the Pan-STARRS/DES and LSST light curves (4 semesters)
- Large Binocular Telescope (LBT) 2*8.4m/LBC, LBT Observatory (0.5 nights)
- Mayall 4m/MOSAIC-3, National Optical Astronomy Observatory (17 nights)
- Bok 2.3m/90Prime, Steward Observatory (19 nights)

Spectroscopy

- Magellan Baade 6.5m/FIRE, Las Campanas Observatory (3 nights)
- MMT 6.5m/Red Channel, MMT Observatory (6 nights)
- P200 Hale 5m/Triplespec, Palomar Observatory (7 nights)
- Gemini GMOS-N, twin 8.1m (1 night in Queue mode)
- MMT 6.5m/Binospec (6.5 nights in Queue mode)
- Lijiang 2.4m/YFOSC, Yunnan Astronomical Observatory (>20 nights)
- Xinglong 2.16m/BFOSC, NAOC Xinglong Observatory (>30 nights)

PRESS

‘Echo Mapping’ in Faraway Galaxies Could Measure Vast Cosmic Distances

NASA Jet Propulsion Laboratory (JPL)

New Discoveries Double the Number of Changing-look AGNs

The Kavli Institute for Astronomy and Astrophysics at Peking University (KIAA-PKU)

HONORS AND AWARDS

- 2020 NASA Astrophysics Data Analysis Program (ADAP, co-I)
- 2015-2016 China Scholarships Council Fellowship
- 2010-2011 The Third Prize Scholarship, Excellent Student, Sichuan University
- 2009-2010 The Third Prize Scholarship, Excellent Student, Sichuan University
- 2008-2009 The Second Prize Scholarship, Excellent Student, Sichuan University

TEACHING EXPERIENCE AND OUTREACH

Teaching Assistant in Fundamental Astronomy, Peking University	2014.03 - 2014.07
Sidewalk astronomy (organizer), Sichuan University	2009 - 2010

CONFERENCES AND TALKS

26. Talk, *Chasing Quasar Accretion State Changes with Chandra*. AAS 241 Winter Meeting, Seattle, Washington, USA, Jan 10, 2023
25. Talk, *Chasing Quasar Accretion State Changes with Chandra*. CfA High Energy Seminar, Harvard–Smithsonian Center for Astrophysics, USA, Nov 30, 2022
24. Talk, *A Southern Photometric Quasar Catalog from the Dark Energy Survey Data Release 2*. CfA Seminar, Harvard–Smithsonian Center for Astrophysics, USA, Nov 1st, 2022
23. Invited talk, *A Southern Photometric Quasar Catalog from the Dark Energy Survey Data Release 2*. Yunnan Observatory (zoom), Oct 24, 2022
22. Invited talk, *Changing Look AGN*. Institute of High Energy Physics, Chinese Academy of Sciences (zoom), June 28, 2022
21. Talk, *Using DES/LSST to Search for Extreme Variables*. Survey Science Meeting, NCSA, UIUC, USA, March 28, 2019
20. Talk, *Spectral Variability of a Sample of Extreme Variability Quasars and Implications for the MgII Broad-line Region*. DES Collaboration Wide Review, (zoom) UIUC, USA, March 11, 2019
19. Poster, *Discovery of 21 New Changing-look AGNs: Study on Evolution of AGNs and AGN Host Galaxies*, the 231st AAS Meeting, Washington, DC, USA, January 2018
18. Sciences with LSST and CSST Forum, Beijing, China, November 2017

17. Talk, *Quasar Photometric Redshift and Candidate Selection and Changing-look Quasars*, Bhole project Group 4 Workshop, Beijing, China, July 2017
16. Rapid talk, *Photo-z and Candidate Selection of Quasars Based on Imaging Data*, DESI Collaboration meeting, Berkeley, USA, June 2017
15. Talk, *Photometric Redshift of Quasars and Quasar Candidate Selection and Changing-look Quasars*, Bhole Group 3 Workshop, Beijing, China, May 2017
14. AGN RM Workshop, Lijiang, China, October 2016
13. DECaLS Workshop, Tucson, USA, August 2016
12. Participated in workshop organization, East-Asia AGN Workshop, Changchun, China, July 2015
11. BASS Survey workshop, Beijing, China, June 2015
10. Talk, *Quasar Photometric Redshift Estimations and Check with SDSS Quasars*, The 2015 KIAA-SHAO Bilateral Workshop, Beijing, China, May 2015
9. KIAA SAC Meeting, Beijing, China, March 2015
8. Mini-workshop on AGN Fueling and Star Formation, Lijiang, China, January 2015
7. LAMOST 973 Meeting, Beijing, China, December 2014
6. Meeting, From Dark Matter to Galaxies, Xi'an, China, May 2014
5. Chinese Astronomical Society Annual Meeting, Suzhou, China, October 2013
4. Molecular Astronomy Workshop, Weihai, China, August 2013
3. Talk, *Quasar Photometric Redshift Estimations and Check with SDSS quasars*, Zhang Heng Conference, Zhangjiajie, China, July 2013
2. Talk, *Quasar Photometric Redshift Estimations and Check with SDSS Quasars*, Jing-Guang-Xia Astrophysics Meeting, Shaoguan, China, June 2013
1. Volunteer, The 28th General Assembly of the International Astronomical Union (IAU), Beijing, China, August 2012

APPROVED TELESCOPE PROPOSALS

- **MMT/Binospec:** Accretion Power and the Broad Line Region: Spectroscopic Follow-up of Changing-look Quasars
Principal Investigator, 2 nights, 2023A
- **MMT/Binospec:** Accretion Power and the Broad Line Region: Spectroscopic Follow-up of Changing-look Quasars
Principal Investigator, 1.5 nights, 2022B
- **Chandra:** Changing-Look Quasars: How/Does Accretion Variability Scale?
Co-I, 165 ks, Cycle 24 (Joint Gemini-N/GMOS 1 night, VLA 8 hours)
- **MMT/Binospec:** Accretion Power and the Broad Line Region: Spectroscopic Follow-up of Strongly Variable Quasars
Principal Investigator, 2 nights, 2022A
- **MMT/Binospec:** Accretion Power and the Broad Line Region: Spectroscopic Follow-up of Strongly Variable Quasars
Co-I, 3 nights, 2021B

- **JWST:** A JWST Study of the Link Between Supermassive Black Holes and Galaxies at Cosmic Noon
Co-I, Cycle 1, ID. 2057
- **MMT/Binospec:** Spectroscopic Follow-up of X-ray-Observed, Strongly Variable Quasars
Co-I, 1 night in 2020A, 1.5 nights in 2020C
- **XMM-Newton:** Unusual Mid-Infrared Flared Objects: Turning-on Obscured AGNs?
Principal Investigator, 206 ks, AO-18
- **Xinglong Telescope (2.16m):** Searching for Changing-look Quasars
Co-I, BFOSC, 23 nights, 2018-2019
- **Lijiang Telescope (2.4m):** Searching for Changing-look Quasars: Turning-off Quasars
Co-I, YFOSC, 8 nights, 2017-2018
- **Xinglong Telescope (2.16m):** Searching for Changing-look Quasars: Turning-on Quasars
Co-I, BFOSC, 21 nights, 2017-2018
- **Hale (5.1m):** Complete the uniform $z \sim 5.5$ quasar sample: spectroscopy in the northern galactic cap
Co-I, DBSP, 2 nights, 2017A
- **Hale (5.1m):** The first $z \sim 5.5$ quasar survey based on PS1-ALLWISE colors: the southern galactic cap spectroscopy
Co-I, DBSP, 2 nights, 2016B
- **Hale (5.1m):** Study black hole masses of luminous $z \sim 5$ quasars
Co-I, Triplespec, 5 nights, 2016A
- **Hale (5.1m):** Study the black hole masses of luminous $z \sim 5$ quasars
Co-I, Triplespec, 4 nights, 2015B
- **MMT (6.5m):** Finding quasars in the post-reionization epoch
Co-I, Red channel, 2 nights, 2015A