

# QIAN YANG

## CONTACT INFORMATION

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Department of Astronomy  
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## WORKING EXPERIENCE

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### Postdoctoral Research Associate

Department of Astronomy, University of Illinois at Urbana-Champaign *2018.09 - Present*

### Visiting Research Scholar

Steward Observatory, University of Arizona *2015.09 - 2016.09*

## EDUCATION

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**Ph.D, Astrophysics**, Peking University *2012.09 - 2018.07*

**Bachelor Degree, Physics**, Sichuan University *2008.09 - 2012.07*

## RESEARCH INTERESTS

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- Physical processes in galactic nuclei
- AGN/quasar variability
- Dust reverberation mapping in distant quasars
- Extreme galactic nuclei transients, changing-look quasars, and tidal disruption events
- Searching for AGN in low-mass galaxies and intermediate-mass black holes
- Coevolution of black holes and galaxies
- High redshift quasars and reionization
- Quasar target selection and photometric redshift estimation

## TECHNICAL EXPERIENCE

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<b>Programming</b>	IDL, Python, R
<b>Software</b>	IRAF, SQL, LaTeX, TOPCAT
<b>Astronomical</b>	Data reduction of optical/NIR spectroscopy Imaging reduction and photometry Photometric redshift estimation of quasars and galaxies

## OBSERVING EXPERIENCE

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### Imaging

- Leading an ongoing observing program using DECam to monitor several LSST Deep Drill Fields to bridge the PanSTARRS/DES and LSST light curves (>40 nights)
- 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
- Lijiang 2.4m/YFOSC, Yunnan Astronomical Observatory (>20 nights)
- Xinglong 2.16m/BFOSC, NAOC Xinglong Observatory (>30 nights)

## PRESS

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### **'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

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- 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

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

## CONFERENCES AND TALKS

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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. 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

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- **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

## REFERENCES

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- Prof. Yue Shen  
Associate Professor; Email: shenyue@illinois.edu  
Department of Astronomy, University of Illinois at Urbana-Champaign
- Prof. Xue-Bing Wu  
Associate Director, Professor; Email: wuxb@pku.edu.cn  
Kavli Institute for Astronomy and Astrophysics, Peking University
- Prof. Xiaohui Fan  
Regents' Professor of Astronomy; Email: fan@as.arizona.edu  
Steward observatory, University of Arizona