

# XIN WANG

## Personal Information

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CURRENT STATUS: Postdoctoral Research Associate at Caltech/IPAC  
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## Education and Employment

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AUG. 2019– PRESENT	Infrared Processing and Analysis Center, Caltech <b>Postdoctoral Research Associate</b>
SEPT. 2015– JUN. 2019	Dept. of Physics and Astronomy, University of California, Los Angeles <b>Ph.D. in Astronomy &amp; Astrophysics</b>
SEPT. 2013– JUN. 2015	Physics Department, University of California, Santa Barbara <b>Master of Arts in Physics</b>
SEPT. 2010– JUN. 2013	School of Astronomy and Space Sciences, Nanjing University <b>Master of Science in Astrophysics</b>
SEPT. 2006– JUN. 2010	Department of Astronomy, Nanjing University <b>Bachelor of Science in Astronomy</b>

## Awards and Honors

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MAR. 2020	Kavli Visiting Fellow, Peking University
JUN. 2019	UCLA Physics and Astronomy Commencement Speaker
JAN. 2019	Chinese Government Award for Outstanding Graduate Students Abroad (\$6k)
DEC. 2018	UCLA Doctoral Student Travel Grant (\$1k)
JUL. 2018	UCLA Richardson Travel Fund (\$1.7k)
JUN. 2018	UCLA Dissertation Year Fellowship (\$47k: stipend+tuition)
MAY 2018	Rudnick-Abelmann Fellowship, UCLA (\$2k)
APR. 2018	IAU grant for participating the XXXth General Assembly (€0.75k)
APR. 2018	AAS International Travel Grant (\$2k)
APR. 2015	AAS International Travel Grant (\$1k)
JUN. 2014	1 <sup>st</sup> Prize for Excellent M.Sc. Thesis amongst all Universities and Colleges in Jiangsu Province, China
SEPT. 2013	Broida Fellowship, UCSB (\$3k)
DEC. 2012	National Scholarship for Graduate Students (CNY30k)
AUG. 2010	1 <sup>st</sup> Prize for Excellent B.Sc. Thesis amongst all Universities and Colleges in Jiangsu Province, China

OCT. 2009	Scholarship of National Astronomical Observatories, Chinese Academy of Sciences
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## Talks and Colloquia

DEC. 2020	<b>Invited Seminar</b> , @ Department of Physics and Astronomy, University of Missouri
DEC. 2019	<b>Invited talk</b> , @ Purple Mountain Observatory, Nanjing
DEC. 2019	<b>Invited talk</b> , @ 2019 Nanjing University Youth Forum, Nanjing
DEC. 2019	<b>Invited talk</b> , @ Shanghai Astronomical Observatory
DEC. 2019	<b>Invited talk</b> , @ Shanghai Jiao Tong University, Shanghai
AUG. 2019	<b>Lunch talk</b> , @ <a href="#">The Kavli Institute for Astronomy and Astrophysics at Peking University</a>
AUG. 2019	<b>Invited talk</b> , @ National Astronomical Observatories of China, Beijing
AUG. 2019	<b>Invited talk</b> , @ Key Laboratory of Space Utilization, CAS
JUN. 2019	<b>Invited talk</b> , @ <a href="#">CLEAR collaboration meeting</a> , STScI
FEB. 2019	<b>Contributed talk</b> , @ <a href="#">Extremely Big Eyes on the Early Universe</a> , UCLA
JAN. 2019	<b>Dissertation Talk</b> , @ <a href="#">AAS 223</a> , Seattle
DEC. 2018	<a href="#">Astronomy Seminar</a> @ Columbia
DEC. 2018	<a href="#">Galread Extragalactic Discussion Group</a> @ Princeton
DEC. 2018	<a href="#">Galaxy Journal Club</a> @ STScI
DEC. 2018	<a href="#">Galaxies &amp; Cosmology Seminar</a> @ CfA Harvard & Smithsonian
NOV. 2018	<a href="#">IMPS Seminar</a> @ UC Santa Cruz
NOV. 2018	<b>Lunch talk</b> @ Carnegie Observatories, Pasadena, CA
OCT. 2018	<b>Astronomy Tea talk</b> @ Caltech, Pasadena, CA
AUG. 2018	<b>Contributed talk</b> , @ <a href="#">Focus Meeting 7 at the XXXth IAU General Assembly</a> , Vienna, Austria
JUL. 2018	<b>Invited talk</b> , @ University of Science and Technology of China, Hefei
JUN. 2018	<b>Contributed talk with conference fellowship</b> , @ <a href="#">KIAA Forum on Gas in Galaxies</a> , Beijing, China
MAY 2018	<b>Invited talk</b> , @ 2018 Nanjing University Youth Forum, Nanjing, China
FEB. 2018	<b>Colloquium talk</b> , @ IPAC, Caltech, Pasadena, CA
JAN. 2018	<b>Lunch talk</b> , @ Carnegie Observatories, Pasadena, CA
SEPT. 2017	<b>Invited talk</b> , @ Tsinghua University, Beijing
SEPT. 2017	<b>Invited talk</b> , @ Nanjing University, Nanjing
SEPT. 2017	<b>Invited talk</b> , @ Shanghai Jiao Tong University, Shanghai
JUN. 2017	<b>Contributed talk</b> , @ <a href="#">Special Session 11 at European Week of Astronomy and Space Science</a> , Prague, Czech Republic
JAN. 2017	<b>Colloquium talk</b> , @ Steward Observatory, University of Arizona, Tucson, AZ
AUG. 2016	<b>Colloquium talk</b> , @ Department of Astronomy, University of Michigan, Ann Arbor, MI
JUL. 2016	<b>Invited talk</b> , @ Tsinghua University, Beijing
JUN. 2016	<b>Invited talk</b> , @ Purple Mountain Observatory, Nanjing

JUN. 2016	<b>Invited talk</b> , @ National Astronomical Observatories of China, Beijing
AUG. 2015	<b>Contributed talk</b> , @ <a href="#">Focus Meeting 22 at the XXIXth IAU General Assembly</a> , Honolulu, HI
NOV. 2012	<b>Contributed talk</b> , @ <a href="#">Tsinghua Transient Workshop 2012</a> , Tsinghua University, Beijing
JUN. 2010	<b>Contributed talk</b> , @ <a href="#">A mini-workshop on “Gamma-ray Sky from Fermi: Neutron Stars and their Environment”</a> , Hong Kong, China
APR. 2009	<b>Contributed talk</b> , @ <a href="#">Frontiers of Space Astrophysics: Neutron Stars &amp; Gamma Ray Bursts — Recent Developments &amp; Future Directions</a> , Cairo & Alexandria, Egypt

### Approved Proposals

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- 11 HST-GO-17159, **PI Wang**, *38 Primary Spacecraft Orbits: [Escaping Lyman Continuum from the Overdensities of Extreme Emission Line Galaxies at  \$z \sim 2.2\$](#)*
- 10 JWST-GO-01571, PI Malkan: [PASSAGE—Parallel Application of Slitless Spectroscopy to Analyze Galaxy Evolution](#)
- 9 JWST-GO-02136, PI Jones: The emergence of the modern Hubble sequence revealed by JWST slit-stepping
- 8 HST-GO-16276, **PI Wang**, *45 Primary Spacecraft Orbits: [WFC3 Spectroscopy of the Most Massive Galaxy Protoclusters at Cosmic Noon](#)*
- 7 JWST-ERS-01324, PI Treu: [Through the Looking GLASS: A JWST Exploration of Galaxy Formation and Evolution from Cosmic Dawn to Present Day](#)
- 6 HST-GO-15647, PI Teplitz: Ultraviolet Imaging of the Cosmic Assembly Near-infrared Deep Extragalactic Legacy Survey Fields (UVCANDELS)
- 5 VLT-0101.B-0418(A), PI Sanchez-Janssen: Chemodynamics of lensed dwarf galaxies at  $1 \lesssim z \lesssim 2$
- 4 Keck, PI Jones: Dissecting Galaxy Formation and Testing Feedback Models on 100 pc Scales: An OSIRIS Survey of Lensed Galaxies at  $z \simeq 2$
- 3 HST-DDT-14922, PI Kelly: Probing the Nature of Dark Matter with Individual Stars Highly Magnified by a Galaxy Cluster
- 2 HST-14280, PI Bradac: Breaking Cosmic Dawn: Observing the  $z > 7$  Universe Through Cosmic Telescopes
- 1 HST-GO-13459, PI Treu: The Grism Lens-Amplified Survey from Space (GLASS)

### Observing Experience

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- Keck OSIRIS, 16 nights
- Keck DEIMOS, 3 nights
- Keck MOSFIRE, 3 nights
- Keck ESI, 1 night
- Steward Observatory Bok telescope, 6 nights
- Palomar Observatory P200 telescope, 2 nights
- Lick Observatory Shane telescope, 1 night

## Professional Service

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- Referee for *Astrophysical Journal*, *Astrophysical Journal Supplement Series*
- External reviewer for Chinese Telescope Access Program Time Allocation Committee
- External reviewer for HST Cycle 29 Time Allocation Committee
- Selected participant in the inaugural [JWST Master Class](#)
- Organizer of the [KIAA JWST Proposal Planning Workshop](#)
- Organizer of the [UCLA JWST Proposal Planning Workshop](#)
- Organizer of Treu Group Meetings, @ UCSB & UCLA
- Organizer of Graduate Journal Club in School of Astronomy and Space Sciences, NJU

## Teaching Experience

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- MAR.–JUN. 2014 Teaching assistant of *Physics 3: Basic Physics*, UCSB
- SEPT.–DEC. 2013 Teaching assistant of *Physics 6 Lab*, UCSB
- SEPT.–DEC. 2010 Teaching assistant of *Theoretical Astrophysics* (upper division undergraduate course), Nanjing University

## Working Experience and Outreach Activities

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- 2015–2017 Demonstrator of Astronomy experiments to local K12 schools in Los Angeles
- 2015–2017 Volunteer in the annual EXPLORING YOUR UNIVERSE! events, UCLA
- 2010–2012 President of Graduate Student Union in School of Astronomy and Space Sciences, Nanjing University

## 1st/2nd Author Papers in Refereed Academic Journals

- 10 **Wang, X.** et al. Measurements of Escaping Lyman Continuum in Galaxy Stacks and Extreme Emission Line Galaxies from UVCANDELS. In prep.
- 9 **Wang, X.** et al. A Census of Sub-kiloparsec Resolution Metallicity Gradients in Star-forming Galaxies at Cosmic Noon from HST Slitless Spectroscopy. 2020, *Astrophys. J.*, 900, 183 ([arXiv:1911.09841](#)) [8 citations]
- 8 **Wang, X.** et al. Discovery of Strongly inverted metallicity gradients in Dwarf Galaxies at  $z \sim 2$ . 2019, *Astrophys. J.*, 882, 94 ([arXiv:1808.08800](#)) [20 citations]
- 7 **Wang, X.** et al. The Grism Lens-Amplified Survey from Space (GLASS) X. Sub-kiloparsec resolution gas-phase metallicity maps at cosmic noon behind the Hubble Frontier Fields cluster MACS1149.6+2223. 2017, *Astrophys. J.*, 837, 89 ([arXiv:1610.07558](#)) [38 citations]
- 6 **Wang, X.** et al. The Grism Lens-Amplified Survey from Space (GLASS) IV. Mass reconstruction of the lensing cluster Abell 2744 from frontier field imaging and GLASS spectroscopy. 2015, *Astrophys. J.*, 811, 29 ([arXiv:1504.02405](#)) [43 citations]
- 5 Jones, T., **Wang, X.** et al. The Grism Lens-Amplified Survey from Space (GLASS) II. Gas-Phase Metallicity and Radial Gradients in an Interacting System At  $z \sim 2$ . 2015, *Astron. J.*, 149, 107 ([arXiv:1410.0967](#)) [49 citations]
- 4 **Wang, X.**, Meng, X.-L., & Huang, Y. F., Testing X-ray Measurements of Galaxy Cluster Gas Mass Fraction Using the Cosmic Distance-Duality Relation and Type Ia Supernovae. 2013, *RAA*, 13, 1013 ([arXiv:1305.2077](#)) [3 citations]
- 3 **Wang, X.**, Meng, X.-L. et al. Observational Constraints on Cosmic Neutrinos and Dark Energy Revisited. 2012, *J. Cosmol. Astropart. Phys.*, 11, 018 ([arXiv:1210.2136](#)) [24 citations]
- 2 **Wang, X.**, Huang, Y. F., & Kong, S. W. Constraint on the Counter-jet Emission in GRB Afterglows from GRB 980703. 2010, *Sci. China-Phys. Mech. Astron.*, 53 (Suppl.1), 259 [3 citations]
- 1 **Wang, X.**, Huang, Y. F., & Kong, S. W. On the Afterglow from the Receding Jet of Gamma-Ray Bursts. 2009, *Astron. Astrophys.*, 505, 1213 ([arXiv:0903.3119](#)) [8 citations]

## Contributing Author Papers in Refereed Academic Journals

- 20 Abramson, L. E., ..., **Wang, X.** et al. The Grism Lens-Amplified Survey from Space (GLASS). XIII. G800L optical spectra from the parallel fields. 2020, *MNRAS*, 493, 952 ([arXiv:1906.00008](#)) [4 citations]
- 19 Morishita, T., ..., **Wang, X.** Massive Dead Galaxies at  $z \sim 2$  with HST Grism Spectroscopy. I. Star Formation Histories and Metallicity Enrichment. 2019, *Astrophys. J.*, 877, 141 ([arXiv:1812.06980](#)) [25 citations]

- 18 Hirtenstein, J., Jones, T., **Wang, X.** et al. The OSIRIS Lens-Amplified Survey (OLAS) I: Dynamical Effects of Stellar Feedback in Low Mass Galaxies at  $z \sim 2$ . 2018, *Astrophys. J.*, 880, 54 ([arXiv:1811.11768](#)) [11 citations]
- 17 Strait, V., ..., **Wang, X.** et al. Mass and Light of Abell 370: A Strong and Weak Lensing Analysis. 2018, *Astrophys. J.*, 868, 129 ([arXiv:1805.08789](#)) [17 citations]
- 16 Finney, E., ..., **Wang, X.** et al. Mass Modeling of Frontier Fields Cluster MACS J1149.5+2223 Using Strong and Weak Lensing. 2018, *Astrophys. J.*, 859, 1 ([arXiv:1806.00698](#)) [8 citations]
- 15 Morishita, T., Abramson, L. E., Treu, T., **Wang, X.** et al. Metal Deficiency in Two Massive Dead Galaxies at  $z \sim 2$ . 2018, *Astrophys. J. Letters*, 856L, 4 ([arXiv:1803.01852](#)) [12 citations]
- 14 Abramson, L. E., ..., **Wang, X.** et al. The Grism Lens-Amplified Survey from Space (GLASS). XII. Spatially Resolved Galaxy Star Formation Histories and True Evolutionary Paths at  $z > 1$ . 2018, *Astron. J.*, 156, 29 ([arXiv: 1710.00843](#)) [9 citations]
- 13 Kelly, P. L., ..., **Wang, X.** et al. Extreme magnification of an individual star at redshift 1.5 by a galaxy-cluster lens. 2018, *Nature Astronomy*, 2, 334 ([arXiv:1706.10279](#)) [71 citations]
- 12 Williams, P. R., ..., **Wang, X.** Discovery of three strongly lensed quasars in the Sloan Digital Sky Survey. 2018, *MNRAS*, 477L, 70 ([arXiv:1706.01506](#)) [16 citations]
- 11 Schmidt, K. B., ..., **Wang, X.** The Grism Lens-Amplified Survey from Space (GLASS). XI. Detection of CIV in Multiple Images of  $z = 6.11$  Ly $\alpha$  Emitter Behind RXCJ2248.7-4431. 2017, *Astrophys. J.*, 839, 17 ([arXiv:1702.04731](#)) [35 citations]
- 10 Morishita, T., Abramson, L. E., Treu, T., Schmidt, K. B., Vulcani, B., **Wang, X.** Characterizing Intracluster Light in the Hubble Frontier Fields. 2017, *Astrophys. J.*, 846, 139 ([arXiv:1610.08503](#)) [48 citations]
- 9 Vulcani, B., ..., **Wang, X.** The Grism lens-amplified survey from space (GLASS). VIII. The influence of the cluster properties on H $\alpha$  emitter galaxies at  $0.3 < z < 0.7$ . 2017, *Astrophys. J.*, 837, 126 ([arXiv:1610.04615](#)) [13 citations]
- 8 Morishita, T., ..., **Wang, X.**, et al. The Grism Lens-Amplified Survey from Space (GLASS). IX. The dual origin of low-mass cluster galaxies as revealed by new structural analyses. 2017, *Astrophys. J.*, 835, 254 ([arXiv:1607.00384](#)) [34 citations]
- 7 Huang, K., ..., **Wang, X.** Detection of Lyman-Alpha Emission From a Triple Imaged  $z=6.85$  Galaxy Behind MACS J2129.4-0741. 2016, *Astrophys. J. Letters*, 823L, 14 ([arXiv:1605.05771](#)) [28 citations]
- 6 Hoag, A., ..., **Wang, X.** et al. The Grism Lens-Amplified Survey from Space (GLASS). VI. Comparing the Mass and Light in MACSJ0416.1-2403 using Frontier Field imaging and GLASS spectroscopy. 2016, *Astrophys. J.*, 831, 182 ([arXiv:1603.00505](#)) [34 citations]

- 5 Schmidt, K. B., ..., **Wang, X.** The Grism Lens-Amplified Survey from Space (GLASS). III. A census of Ly $\alpha$  Emission at  $z \gtrsim 7$  from HST Spectroscopy. 2016, *Astrophys. J.*, 818, 38 ([arXiv:1511.04205](#)) [52 citations]
- 4 Rodney, S., ..., **Wang, X.**, et al. Illuminating a Dark Lens : A Type Ia Supernova Magnified by the Frontier Fields Galaxy Cluster Abell 2744. 2015, *Astrophys. J.*, 811, 70 ([arXiv:1505.06211](#)) [56 citations]
- 3 Treu, T., Schmidt, K. B., Brammer, G. B., Vulcani, B., **Wang, X.** et al. The Grism Lens-Amplified Survey from Space (GLASS). I. Survey Overview and First Data Release. 2015, *Astrophys. J.*, 812, 114 ([arXiv:1509.00475](#)) [143 citations]
- 2 Schmidt, K. B., Treu, T., Brammer, G. B., Bradac, M., **Wang, X.** et al. Through the Looking GLASS: HST Spectroscopy of Faint Galaxies Lensed by the Frontier Fields Cluster MACSJ0717.5+3745. 2014, *Astrophys. J. Letters*, 782L, 36 ([arXiv:1401.0532](#)) [102 citations]
- 1 Meng, X.-L., Zhang, T.-J., Zhan, H., & **Wang, X.** Morphology of Galaxy Clusters: A Cosmological Model-Independent Test of the Cosmic Distance-Duality Relation. 2012, *Astrophys. J.*, 745, 98 ([arXiv:1104.2833](#)) [58 citations]