

## Ji Wang

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CITIZENSHIP	P.R.China, U.S. permanent resident	
RESEARCH INTERESTS	Exoplanet detection and characterization using the radial velocity technique, transit photometry, high contrast imaging technique, and high resolution spectroscopy. High resolution imaging and interferometry. Planet formation and habitability in multiple stellar systems and planets at wide orbits. The influence of stellar abundances on planet formation.	
EXPERIENCES	<b>The Ohio State University</b> , Columbus, OH, USA Assistant Professor, August 2018  <b>California Institute of Technology</b> , Pasadena, California, USA Postdoctoral Scholar, September 2015  <b>Yale University</b> , New Haven, Connecticut, USA Postdoctoral Scholar, September 2012  <b>University of Florida</b> , Gainesville, Florida, USA Ph.D., Astronomy, July 2012 <ul style="list-style-type: none"><li>Thesis Topic: <i>Toward Massive Detection of Planets Around M-Dwarfs Using the Radial Velocity Technique</i></li></ul> M.S., Astronomy, May 2008 <ul style="list-style-type: none"><li>Thesis Topic: <i>High-Contrast Imaging of Exoplanets Around Giant Stars</i></li></ul> <b>University of Science and Technology of China</b> , Hefei, Anhui, P.R.China B.S., Astrophysics, July 2006	
PROJECTS AS PI	<b>Principle investigator for observations of 18 Keck nights, 25 Palomar nights, and a total of \$54,750 research funding as of Jun 2017.</b>	
REFEREED PUBLICATIONS (FIRST& SECOND AUTHOR)	<b>21 first- and second-authored refereed publications and 3615 total citations, 280 citations for first- and second-authored refereed publications, h-index = 17 (as of Jun 2017)</b>  <b>Wang, J.</b> , Trevor J. David, Lynne Hillenbrand, Dimitri Mawet, Simon Albrecht, Zibo Liu; 2018, ApJ, accepted, EPIC 203868608: A low-mass quadruple star system in the Upper Scorpius OB association  <b>Wang, J.</b> , Dimitri Mawet, Jonathan J. Fortney, Callie Hood, Caroline V. Morley, Bjorn Benneke; 2018, AJ, accepted, Detecting Methane In HR 8799 c with High Dispersion Spectroscopy Aided By Adaptive Optics	

- Garreth Ruane, **Wang, J.**, Dimitri Mawet, Nemanja Jovanovic, Jacques-Robert Delorme, Bertrand Mennesson, J. Kent Wallace; 2018, ApJ, accepted, Efficient spectroscopy of exoplanets at small angular separations with vortex fiber nulling
- Wang, J.**; Mawet, Dimitri; Ruane, Garreth; Delorme, Jacques-Robert; Klimovich, Nikita; Hu, Renyu; 2018, JATIS, 4, 4 Baseline requirements for detecting biosignatures with the HabEx and LUVOIR mission concepts
- Wang, J.**, Prato, Lisa; Mawet, Dimitri; 2017, ApJ, 838, 35, Time-Resolved High Spectral Resolution Observation of 2MASSW J0746425+200032AB
- Wang, J.**, Mawet, Dimitri; Ruane, Garreth; Renyu, Hu; Benneke, Bjorn; 2017, AJ, 153, 183, Observing Exoplanets with High Dispersion Coronagraphy. I. The Scientific Potential of Current and Next-Generation Large Ground and Space Telescopes
- Zhu, Wei; **Wang, J.**; Huang, Chelsea; 2016, ApJ, 832, 196, Dependence of Small Planet Frequency on Stellar Metallicity Hidden by Their Prevalence
- Wang, J.**, Fischer, Debra A.; Barclay, Thomas; Picard, Alyssa; et al., 2015, ApJ, 815, 127, Planet Hunters. VIII. Characterization of 41 Long-period Exoplanet Candidates from Kepler Archival Data
- Wang, J.**, Fischer, Debra A.; Ji-Wei, Xie; Ciardi, David; et al., 2015, ApJ, 813, 130, Influence of Stellar Multiplicity on Planet Formation. IV. Adaptive Optics Imaging of Kepler Stars with Multiple Transiting Planet Candidates
- Wang, J.**, Fischer, Debra A., Horch, Elliott P., Xie, Ji-Wei., 2015, ApJ, 806, 248, Influence of Stellar Multiplicity on Planet Formation. III. Adaptive Optics Imaging of Kepler Stars With Gas Giant Planets
- Wang, J.** & Fischer, D. A. 2015, AJ, 149, 14, Revealing A Universal Planet-Metallicity Correlation For Planets of Different Sizes Around Solar-Type Stars
- Wang, J.**, Fischer, Debra A., Horch, Elliott P., Huang, Xu., 2015, ApJ, 799, 229, On the Occurrence Rate of Hot Jupiters in Different Stellar Environments
- Wang, J.**, Fischer, Debra A.; Xie, Ji-Wei; Ciardi, David R., 2014, ApJ, 791, 111, Influence of Stellar Multiplicity On Planet Formation. II. Planets Are Less Common in Multiple Star Systems with Separations Smaller than 1500 AU
- Wang, J.**, Xie, Ji-Wei; Barclay, Thomas; Fischer, Debra A., 2014, ApJ, 783, 4, Influence of Stellar Multiplicity On Planet Formation. I. Evidence of Suppressed Planet Formation Due to Stellar Companions Within 20 AU and Validation of Four Planets From the *Kepler* Multiple Planet Candidates
- Schmitt, J. R., **Wang, J.**, Fischer, D. A., et al. 2014, AJ, 148, 28, Planet Hunters. VI. An Independent Characterization of KOI-351 and Several Long Period Planet Candidates from the Kepler Archival Data
- Wang, J.**, et al. 2013, ApJ, 776, 10, Planet Hunters. V. A Confirmed Jupiter-Size Planet in the Habitable Zone and 42 Planet Candidates from the Kepler Archive Data
- Wang, J.**, Ge, J., Wan, X., De Lee, N., & Lee, B. 2012, PASP, 124, 1159, Accurate Group Delay Measurement for Radial Velocity Instruments Using the Dispersed Fixed Delay Interferometer Method. II. Application of Heterodyne Combs Using an External Interferometer Filter

**Wang, J.**, Ge, J., Wan, X., Lee, B., & De Lee, N. 2012, *PASP*, 124, 598, Accurate Group-Delay Measurement for Radial-Velocity Instruments Using the Dispersed Fixed-Delay Interferometer Method

**Wang, J.**, & Ford, E. B. 2011, *MNRAS*, 418, 1822, On the eccentricity distribution of short-period single-planet systems

**Wang, J.**, Ge, J., Jiang, P., & Zhao, B. 2011, *ApJ*, 738, 132, Fundamental Performance of a Dispersed Fixed Delay Interferometer in Searching for Planets around M Dwarfs

Wan, X.; **Wang, J.**; Ge, J. Accurate Measurement of Interferometer Group Delay Using Field-compensated Scanning White Light Interferometer. *Applied Optics*. Vol. 49 Issue 29, pp.5645-5653 (2010).

Wan, X.; **Wang, J.**; Ge, J. Resolving Fringe Ambiguities of a Wide-field Michelson Interferometer Using Visibility Measurements of a Noncollimated Laser Beam. *Applied Optics*. Vol. 48 Issue 26, pp.4909-4916 (2009).

BOOK  
CHAPTER

Heliophysics: Active Stars, their Astrospheres, and Impacts on Planetary Environments. Edited by Carolus J. Schrijver, Frances Bagenal and Jan J. Sojka. Chapter 5. Characteristics of planetary systems by Debra Fischer and **Ji Wang**.

OTHER  
REFEREED  
PUBLICATIONS

**26 contributing refereed publications (as of Jan 2017)**

Liu, Hui-Gen et al., 2018, *AJ*, 155, 12, Searching for the Transit of the Earth-mass Exoplanet Proxima Centauri b in Antarctica: Preliminary Result

Zhang, Shaohua et al., 2017, *ApJ*, 836, 86, Ultraviolet and Optical Emission Line Outflows in the Heavily Obscured Quasar SDSS J000610.67+121501.2: At the Scale of the Dusty Torus and Beyond

David, Trevor et al., 2017, *ApJ*, 835, 168, A Transient Transit Signature Associated with the Young Star RIK-210

Ma, Bo, et al., 2016, *AJ*, 152, 112, Very Low-mass Stellar and Substellar Companions to Solar-like Stars from MARVELS. VI. A Giant Planet and a Brown Dwarf Candidate in a Close Binary System HD 87646

Ngo, Henry, et al., 2016, *ApJ*, 827, 8, Friends of Hot Jupiters. IV. Stellar Companions Beyond 50 au Might Facilitate Giant Planet Formation, but Most are Unlikely to Cause Kozai-Lidov Migration

Roberts, Lewis C., et al. 2016, *AJ*, 151, 169, Characterization of the Companion  $\mu$  Her

Schmitt, J. R., et al. 2016, *AJ*, 151, 159, Planet Hunters. X. Searching for Nearby Neighbors of 75 Planet and Eclipsing Binary Candidates from the K2 Kepler extended mission

Eastman, Jason D., et al., 2016, *AJ*, 151, 45, KELT-4Ab: An Inflated Hot Jupiter Transiting the Bright ( $V \sim 10$ ) Component of a Hierarchical Triple

Montet, Benjamin T., et al. 2015, *ApJ*, 813, 11, Dynamical Masses of Young M Dwarfs: Masses and Orbital Parameters of GJ 3305 AB, the Wide Binary Companion to the Imaged Exoplanet Host 51 Eri

LaCourse, D. M., et al. 2015, *MNRAS*, 452, 3561, Kepler Eclipsing Binary Stars. VI. Identification of Eclipsing Binaries in the K2 Campaign 0 Data-set

Alam, Shadab, et al., 2015, *ApJS*, 219, 12, The Eleventh and Twelfth Data Releases of the Sloan Digital Sky Survey: Final Data from SDSS-III

- Fleming, S. W., et al. 2015, AJ, 149, 143, The APOGEE Spectroscopic Survey of Kepler Planet Hosts: Feasibility, Efficiency, and First Results
- Bieryla, A., et al. 2015, AJ, 150, 12, KELT-7b: A hot Jupiter transiting a bright V=8.54 rapidly rotating F-star
- Ghezzi, L., et al. 2014, AJ, 148, 105, Accurate Atmospheric Parameters at Moderate Resolution Using Spectral Indices: Preliminary Application to the MARVELS Survey
- Jiang, P., et al. 2013, AJ, 146, 65, Very Low Mass Stellar and Substellar Companions to Solar-like Stars from MARVELS. IV. A Candidate Brown Dwarf or Low-mass Stellar Companion to HIP 67526
- Pepper, J., et al. 2013, ApJ, 773, 64, KELT-3b: A Hot Jupiter Transiting a V = 9.8 Late-F Star
- De Lee, N., et al. 2013, AJ, 145, 155, Very Low Mass Stellar and Substellar Companions to Solar-like Stars from MARVELS. V. A Low Eccentricity Brown Dwarf from the Driest Part of the Desert, MARVELS-6b
- Wright, J. T., et al. 2013, ApJ, 770, 119, MARVELS-1: A face-on double-lined binary star masquerading as a resonant planetary system; and consideration of rare false positives in radial velocity planet searches
- Ma, B., et al. 2013, AJ, 145, 20, Very-low-mass Stellar and Substellar Companions to Solar-like Stars from Marvels. III. A Short-period Brown Dwarf Candidate around an Active G0IV Subgiant
- Ahn, C. P., et al. 2012, ApJS, 203, 21, The Ninth Data Release of the Sloan Digital Sky Survey: First Spectroscopic Data from the SDSS-III Baryon Oscillation Spectroscopic Survey
- Fleming, S. W., et al. 2012, AJ, 144, 72, Very Low Mass Stellar and Substellar Companions to Solar-like Stars from MARVELS. II. A Short-period Companion Orbiting an F Star with Evidence of a Stellar Tertiary and Significant Mutual Inclination
- Wisniewski, J. P., et al. 2012, AJ, 143, 107, Very Low Mass Stellar and Substellar Companions to Solar-like Stars from MARVELS. I. A Low-mass Ratio Stellar Companion to TYC 4110-01037-1 in a 79 Day Orbit
- Eisenstein, D. J., et al. 2011, AJ, 142, 72, SDSS-III: Massive Spectroscopic Surveys of the Distant Universe, the Milky Way, and Extra-Solar Planetary Systems
- Aihara, H., et al. 2011, ApJS, 193, 29, The Eighth Data Release of the Sloan Digital Sky Survey: First Data from SDSS-III
- Lee, B. L., et al. 2011, ApJ, 728, 32, MARVELS-1b: A Short-period, Brown Dwarf Desert Candidate from the SDSS-III Marvels Planet Search
- Wright, J. T., et al. 2009, ApJ, 699, L97, A Third Giant Planet Orbiting HIP 14810
- Wang, J.**, Mawet, D., Ruane, G., Delorme, J., Klimovich, N., & Renyu, Hu, 2017, Proc. SPIE, 10400, Baseline Requirement For Detecting Biosignature For the HabEx and LUVOIR Missions
- Wang, J.**, Mawet, D., Renyu, Hu, & Benneke, B. 2016, Proc. SPIE, 9911, High-contrast imaging and high-resolution spectroscopy observation of exoplanets

CONFERENCE  
PROCEEDINGS

- Ge, J., et al. 2012, Proc. SPIE, 8446, Design and performance of a new generation, compact, low cost, very high Doppler precision and resolution optical spectrograph
- Ge, J., et al. 2012, Proc. SPIE, 8446, High resolution Florida IR silicon immersion grating spectrometer and an M dwarf planet survey
- Zhao, B., Ge, J., Nguyen, D. C., **Wang, J.**, & Groot, J. 2010, Proc. SPIE, 7735, Design of a near-IR Doppler instrument for planet searches
- Ge, J., et al. 2010, Proc. SPIE, 7735, Design, performance, and early results from extremely high Doppler precision instruments in a global network
- Wang, J.**, Wan, X., & Ge, J. C. 2010, Proc. SPIE, 7734, Development of Monolithic Michelson Interferometer for RV measurement in IR
- Wan, X., & Ge, J., **Wang, J.** 2009, Proc. SPIE, 7424, Monolithic interferometer for high precision radial velocity measurements
- Ge, J., et al. 2009, Proc. SPIE, 7440, A new generation multi-object Doppler instrument for the SDSS-III Multi-object APO Radial Velocity Exoplanet Large-area Survey

HONORS AND  
AWARDS

- Yale Department Travel Fund Award, Aug, 2014
- Postdoctoral Scholars Travel Fund Award, Feb, 2014
- Graduate Travel Award, Dec, 2011
- Architect for MARVELS in SDSS III, May, 2011
- First Place for Poster Presentation in Probing the Diversity of Brown Dwarfs and Exoplanets Conference in Shanghai, China, Jul, 2008

INVITED TALKS

- “Searching for Biosignatures on Other Worlds”, Colloquium Talk at UCLA, Apr, 2018
- “Searching for Biosignatures on Other Worlds”, Colloquium Talk at the Ohio State University, Feb, 2018
- “Adaptive Optics in Exoplanetary Research”, Colloquium Talk at Las Cumbres Observatory, Santa Barbara, CA, Feb, 2018
- “Adaptive Optics in Exoplanetary Research”, Plenary Talk at CFAO retreat, Lake Arrowhead, Sep, 2017
- “Where and How to Find Habitable Planets”, Colloquium Talk, University of Montreal, Sep, 2017
- “Where and How to Find Habitable Planets”, Colloquium Talk, University of California at Berkeley, Aug, 2017
- “The New Frontier of Exoplanetary Science: High Dispersion Coronagraphy (HDC)”, Lunch Talk, Carnegie Observatories, May, 2017
- “The New Frontier of Exoplanetary Science: High Dispersion Coronagraphy (HDC)”, Colloquium Talk, IfA, University of Hawaii, Feb, 2017
- “Where and How to Find Habitable Planets”, Colloquium Talk, IfA, University of Hawaii, Feb, 2017
- “High-Contrast Imaging and High-Resolution Spectroscopy Observation of Exoplanets”, LUVUOIR seminar Talk, Oct 2016
- “Planet Formation Under Different Environments”, Colloquium Talk, UCLA, Apr 2014
- “Planet Formation Under Different Environments”, Lunch Talk, Carnegie Observatories, Mar 2014
- “Planet Formation Under Different Environments”, Seminar Talk, Yale Center for Astronomy and Astrophysics, Yale University, Mar 2014
- “Planet Formation Under Different Environments”, Seminar Talk, Tsinghua University, Mar 2014
- “Planet Formation Under Different Environments”, Colloquium Talk, Wesleyan University, Nov 2014

“Stellar Influence On Planet Formation”, Connecticut Star Party, Ashford CT, Sep 2014  
“Advancing Our Knowledge of Planets in the Habitable Zone and Beyond”, Colloquium Talk, IPAC, California Institute of Technology, Jul 2014  
“Planets in Binary Stars”, invited talk, CT Exoplanet Picnic, Wesleyan University, May 2014  
“Stellar Multiplicity Influence on Planet Formation”, seminar talk, Center for Exoplanets and Habitable Worlds, PSU, April 2014  
“Advancing Our Knowledge of Planets in the Habitable Zone and Beyond”, Exoplanet Talk, Princeton University, Nov, 2013  
“Searching Exoplanets in Habitable Zone Around Low Mass Stars”, AAPT Winter Meeting, Jacksonville, FL, Jan, 2011

#### OTHER TALKS

“The New Frontier of Exoplanetary Science: High Dispersion Coronagraphy (HDC)”, Invited Talk, KISS workshop, Pasadena, CA, Apr, 2018  
“The New Frontier of Exoplanetary Science: High Dispersion Coronagraphy (HDC)”, FLASH Talk, UC Santa Cruz, Aug, 2017  
”Planet Formation Under Different Environments”, Lunch Talk, IPAC, Jun 2015  
“Planet Formation Under Different Environments”, Lunch Talk, Kavli Institute for Astronomy and Astrophysics, Peking University, Mar 2014  
“Planets in Binary Stars”, Keck Science Meeting, California Institute of Technology, Oct 2014  
“Putting An End to Twinkling Litter Stars”, Astro on Tap, New Haven CT, Sep 2014  
“Advancing Our Knowledge of Planets in the Habitable Zone and Beyond”, Special Seminar Talk, UC Berkeley, Aug 2014  
“Advancing Our Knowledge of Planets in the Habitable Zone and Beyond”, special seminar, University of Pennsylvania, April 2014  
“Revealing A Universal Planet-Metallicity Correlation”, Oral presentation, AAS 223rd Meeting, National Harbor, Maryland, Jan 2014  
“Advancing Our Knowledge of Planets in the Habitable Zone and Beyond”, Special Colloquium Talk, University of Florida, Nov, 2013  
“Searching For Planets Around M Dwarfs Using the Radial Velocity Technique”, AAS 219th Meeting, Austin, TX, Jan, 2012  
“Development of A Monolithic Interferometer For Precise Radial Velocity Measurement”, Flash Talk, University of Arizona, May, 2008

#### COMMUNITY SERVICE

Reviewer for ApJ, ApJL, AJ, PASP, A&A, MNRAS, and Nature  
Reviewer for the NASA Maturation of Instruments for Solar System Exploration (MatisSE) Program  
Panelist on HST proposal review panel  
Reviewer for the Swiss National Science Foundation  
Member of admission committee at Yale University  
Connecticut Star Party, Ashford, CT, Sep, 2014  
Venus Transit Event, Gainesville, FL, Jun 2012  
Wiles Science Symposium, Gainesville, FL, May 2010  
Mercury Transit Event, Gainesville, FL, Nov 2006  
Stars Shine on East Gainesville, FL, Sep 2006 and Oct 2010  
Volunteer in Teaching Observatory at the University of Florida, Gainesville, 2006-2012

#### MEDIA COVERAGE

Caltech: [Inventing Tools for Detecting Life Elsewhere](#)  
USA Today: [Volunteers spot jumbo planet in star’s ‘habitable zone’](#)  
NBC: [NASA’s Kepler mission uncovers 461 more potential planets to check out](#)

LA Times: Kepler data point to more planets in habitable zone  
Telegraph: Moons rather than planets are the best place to find aliens  
SDSS Blog: Ji Wang: A Rising Star in the Search for Exoplanets  
BBC: Seven-planet solar system found

TEACHING  
EXPERIENCE

2007-2009, Astro 1022L, Introduction to Astronomy, University of Florida

STUDENTS  
MENTORED

Jacklyn Pezzato, graduate student, Caltech, 2018-  
Joseph Schmitt, graduate student, Yale University, 2012-2015  
Lamiya Mowla, graduate student, Yale University, 2014-2015  
Carlos Sosa, undergraduate student, Caltech, 2018  
Yangyang Li, undergraduate student, USTC, 2017-2018  
Zhibo Liu, undergraduate student, NJU, 2017  
Sizheng Ma, undergraduate student, THU, 2016  
Alyssa Picard, undergraduate student, Yale University, 2012-2015  
Cory Combs, undergraduate student, Yale University, 2012-2015  
Charles Margossian, undergraduate student, Yale University, 2013-2015

REFERENCES  
AVAILABLE TO  
CONTACT

**Prof. Jian Ge** (e-mail: [jge@astro.ufl.edu](mailto:jge@astro.ufl.edu); phone: +1-352-294-1850)

- Professor, Astronomy, University of Florida
- *Prof. Ge is my Ph.D. adviser.*

**Prof. Debra Fischer** (e-mail: [debra.fischer@yale.edu](mailto:debra.fischer@yale.edu); phone: +1-203-432-1613)

- Professor, Astronomy  
Yale University
- *Prof. Fischer is my postdoc mentor.*

**Prof. Dimitri Mawet** (e-mail: [dmawet@astro.caltech.edu](mailto:dmawet@astro.caltech.edu) ; phone: +1-626-395-1452)

- Professor, Astronomy  
California Institute of Technology
- *Prof. Mawet is my postdoc mentor.*

**Prof. Eric B. Ford** (e-mail: [ericbford@gmail.com](mailto:ericbford@gmail.com); phone: +1-814-863-5558)

- Professor, Astronomy  
The Pennsylvania State University
- *Prof. Ford is my Ph.D. co-adviser and collaborator.*

**Prof. Justin R. Crepp** (e-mail: [jcrepp@nd.edu](mailto:jcrepp@nd.edu); phone: +1-574-631-4092)

- Professor, Astronomy  
University of Notre Dame
- *Prof. Crepp is my collaborator.*