

**Hai Fu**  
Curriculum Vitae (2021)

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## EDUCATION AND PROFESSIONAL HISTORY

### Higher Education

2008	Ph.D., Astronomy, University of Hawai'i
2005	M.S., Astronomy, University of Hawai'i
2003	B.S., Astronomy, Nanjing University

### Professional and Academic Positions

2019 – Present	Associate Professor, Physics & Astronomy, University of Iowa
2013 – 2019	Assistant Professor, University of Iowa
2011 – 2013	Postdoctoral Research Associate, University of California, Irvine
2008 – 2011	Postdoctoral Researcher, California Institute of Technology

### Professional Service

2009 – Present	Referee for the Astrophysics Journal, the Astronomical Journal, Astronomy and Astrophysics, Monthly Notices of the Royal Astronomical Society, New Astronomy Reviews
2015, 18, 19	Reviewer for Grant Proposals, National Science Foundation
2017	Reviewer of Large Program Proposals, James Clerk Maxwell Telescope
2013 - 2015	Science Reviewer of Observing Proposals, National Radio Astronomy Observatory

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## SCHOLARSHIP

### Research Interest

Galaxy mergers, Rotation curves of high-redshift galaxies, Gas accretion in early massive halos

### Selected Publications (2012-2021)

- Steffen, J. L., Fu, H., Comerford, J. M., and 4 colleagues 2021. SDSS-IV MaNGA: The Radial Profile of Enhanced Star Formation in Close Galaxy Pairs. *The Astrophysical Journal* 909, 13 pages
- Fu, H., Xue, R., Prochaska, J. X., and 5 colleagues 2021. A Long Stream of Metal-poor Cool Gas around a Massive Starburst Galaxy at  $z = 2.67$ . *The Astrophysical Journal* 908, 26 pages
- Gross, A. C., Fu, H., Myers, A. D., and 2 colleagues 2019. X-Ray Properties of Radio-selected Dual Active Galactic Nuclei. *The Astrophysical Journal* 883, 11 pages
- Isbell, J. W., Xue, R., and Fu, H. 2018. The Evolution of Molecular Gas Fraction Traced by the CO Tully-Fisher Relation. *The Astrophysical Journal Letters* 869, 8 pages
- Xue, R., Fu, H., Isbell, J., and 3 colleagues 2018. Flat Rotation Curves Found in Merging Dusty Starbursts at  $z = 2.3$  through Tilted-ring Modeling. *The Astrophysical Journal Letters* 864, 9 pages
- Fu, H., Steffen, J. L., Gross, A. C., and 7 colleagues 2018. SDSS-IV MaNGA: Galaxy Pair Fraction and Correlated Active Galactic Nuclei. *The Astrophysical Journal* 856, 19 pages
- Fu, H., Isbell, J., Casey, C. M., and 4 colleagues 2017. The Circumgalactic Medium of Submillimeter Galaxies. II. Unobscured QSOs within Dusty Starbursts and QSO Sightlines with Impact Parameters below 100 kpc. *The Astrophysical Journal* 844, 16 pages
- Fu, H., Hennawi, J. F., Prochaska, J. X., and 14 colleagues 2016. The Circumgalactic Medium of Submillimeter Galaxies. I. First Results from a Radio-identified Sample. *The Astrophysical Journal* 832, 11 pages
- Fu, H., Wrobel, J. M., Myers, A. D., and 2 colleagues 2015. Binary Active Galactic Nuclei in Stripe 82: Constraints on Synchronized Black Hole Accretion in Major Mergers. *The Astrophysical Journal Letters* 815, 7 pages
- Fu, H., Myers, A. D., Djorgovski, S. G., and 3 colleagues 2015. Radio-selected Binary Active Galactic Nuclei from the Very Large Array Stripe 82 Survey. *The Astrophysical Journal* 799, 10 pages
- Calanog, J. A., Fu, H., Cooray, A., and 39 colleagues 2014. Lens Models of Herschel-selected Galaxies from High-resolution Near-IR Observations. *The Astrophysical Journal* 797, 26 pages

- Wrobel, J. M., Walker, R. C., and Fu, H. 2014. Evidence from the Very Long Baseline Array that J1502SE/SW are Double Hotspots, not a Supermassive Binary Black Hole. *The Astrophysical Journal Letters* 792, 4 pages
- Fu, H., Cooray, A., Feruglio, C., and 41 colleagues 2013. The rapid assembly of an elliptical galaxy of 400 billion solar masses at a redshift of 2.3. *Nature* 498, 4 pages
- Bussmann, R. S., Gurwell, M. A., Fu, H., and 35 colleagues 2012. A Detailed Gravitational Lens Model Based on Submillimeter Array and Keck Adaptive Optics Imaging of a Herschel-ATLAS Submillimeter Galaxy at  $z = 4.243$ . *The Astrophysical Journal* 756, 11 pages
- Fu, H., Jullo, E., Cooray, A., and 48 colleagues 2012. A Comprehensive View of a Strongly Lensed Planck-Associated Submillimeter Galaxy. *The Astrophysical Journal* 753, 12 pages
- Fu, H., Yan, L., Myers, A. D., and 4 colleagues 2012. The Nature of Double-peaked [O III] Active Galactic Nuclei. *The Astrophysical Journal* 745, 18 pages

## Grants and Contracts

- Sep 2021 - Aug 2024 *A Comprehensive Study of Nearby Galaxy Mergers with a Massive Integral-Field Spectroscopic Survey*  
NSF AST-2103251  
Funded by National Science Foundation.  
Award amount: (\$343,595.00).
- Sep 2016 - Aug 2021 *Understanding Merger-Driven Galaxy Evolution with a Uniform Sample of Sub-Galactic-Scale Binary Active Galactic Nuclei*  
NSF AST-1614326  
Funded by National Science Foundation.  
Award amount: (\$405,011.00).
- Dec 2016 - Dec 2018 *Testing the Merger Paradigm: X-ray Observations of Radio-Selected Sub-Galactic-Scale Binary AGNs*  
Chandra #18700044  
Funded by Smithsonian Astrophysical Observatory (Chandra X-ray Observatory).  
Award amount: (\$67,399.00).
- Apr 2016 - Sep 2017 *National Radio Astronomical Observatory Student Observing Support*  
SOSPA3-016  
Funded by National Radio Astronomical Observatory.  
Award amount: (\$34,994.00).
- Dec 2013, Feb 2017 *Probing the Circum-Galactic Medium of Herschel-Selected Submillimeter Galaxies RSA-1495624, and RSA-1568087*  
Funded by NASA Exoplanet Science Institute (Keck Observatory).  
Award amount: (\$23,600.00).

## Selected Lectures and Conference Presentations

- 2019 *The ISM and CGM of Dusty Starburst Galaxies*, invited review talk, MIST2019 Meeting on “Cosmic turbulence and magnetic fields: physics of baryonic matter across time and scales”, Cargese, Corsica, France
- 2018 *Do Galaxy Mergers Trigger Active Galactic Nuclei?*, invited colloquium, National Radio Astronomy Observatory, Socorro, New Mexico, United States
- 2015 *Understanding Galaxy Evolution with Dusty Starburst Galaxies*, invited colloquium, Gemini South Observatory, La Serena, Chile
- 2015 *Adaptive Optics in Astronomy*, invited review talk, Meeting on AGN Fueling and Star Formation, Lijiang, Yunnan, China
- 2015 *Extended Emission Line Regions around Quasars*, invited review talk, Workshop on AGN Ionization Echoes, La Serena, Chile
- 2012 *Merger-Induced Black Hole Accretion & Star Formation: Observations vs. Simulations*, invited colloquium, Jet Propulsion Laboratory, Pasadena, California, United States