

# Xiaosheng Huang

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## Education

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PhD, Physics: University of California, Berkeley	December, 2004
MA, Physics, Kent State University	May, 1995
BS, Physics ( <i>Summa Cum Laude</i> ), Kent State University	May, 1995

## Professional Appointments

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Professor: Department of Physics & Astronomy, University of San Francisco	2024 –
Associate Professor: Department of Physics & Astronomy, University of San Francisco	2018 – 2024
Assistant Professor: Department of Physics & Astronomy, University of San Francisco	2012 – 2018
Lecturer: Physics Department, University of California, Berkeley	2007 – 2012
Postdoctoral Fellow: UC Berkeley/Lawrence Berkeley National Laboratory	2005 – 2012
Graduate Student Researcher: Physics Department, UC Berkeley	2000 – 2004
Graduate Student Researcher: Astronomy Department, UC Berkeley	1996 – 1999
Graduate Student Instructor: Physics Department, UC Berkeley	1995, 1999
Teaching Assistant: Physics Department, Kent State University	1993 – 1995
Lab Assistant: Liquid Crystal Institute, Kent State University	1992 – 1993

## Press Releases & Publicity

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<a href="#">NPR Interview</a>	2025
<a href="#">Lawrence Berkeley National Laboratory Press Release</a>	2024
<a href="#">USF News Article on Roman Space Telescope Program</a>	2023
<a href="#">Lawrence Berkeley National Laboratory Computing Sciences Highlight</a>	2023
<a href="#">European Southern Observatory Press Release</a>	2023
<a href="#">American Astronomical Society Nova Highlight</a>	2023
<a href="#">Press Conference, American Astronomical Society Annual Meeting</a>	2021
<a href="#">American Astronomical Society Nova Highlight</a>	2021
<a href="#">National Science Foundation's NOIRLab Press Release</a>	2021
<a href="#">Lawrence Berkeley National Laboratory Press Release</a>	2021
<a href="#">Lawrence Berkeley National Laboratory Press Release</a>	2020
<a href="#">USF Magazine Article on Faith</a>	2020
<a href="#">USF News Article on Hubble Space Telescope Program</a>	2019

## Awards & Grants

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<a href="#">Hubble Space Telescope Program</a> , with NASA Grant (\$190K projected)	2025
<a href="#">Hubble Space Telescope Program</a> , with NASA Grant (\$60K projected)	2025
<a href="#">Dean's Scholar Award</a> , College of Arts & Sciences, USF	2024
<a href="#">NASA Roman Space Telescope Mission Research and Support Program</a> (\$64K)	2023
<a href="#">Outstanding Mentors Award</a> , Lawrence Berkeley National Laboratory	2021
<a href="#">Hubble Space Telescope Program</a> , with NASA Grant (\$189K)	2019
<a href="#">Visiting Faculty Program</a> , Department of Energy (with summer stipends)	2017, 2018, 2019, 2025
<a href="#">Faculty Development Fund</a> , USF (multiple awards)	2012 –
<a href="#">Graduate Student Travel Grant</a> , University of California, Berkeley	2004
<a href="#">University Fellowship</a> , University of California, Berkeley	1995

# Teaching

## *Teaching Highlights*

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I have developed, and continue to update, the artificial intelligence (AI) course series since 2013: PHYS 301, 302, and 303. I have also established two minor programs: Engineering Physics and Applied AI.

## *Courses, University of San Francisco, 2012 –*

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PHYS 120	Astronomy: From the Earth to the Cosmos
PHYS 120 Lab	See above
PHYS 121	Planetary Astronomy
PHYS 121 Lab	See above
PHYS 301	Introduction to Scientific Computation
PHYS 302	Scientific Computation & Machine Learning
PHYS 303	Deep Learning & Bayesian Learning
PHYS 343	Astrophysics (Cosmology)
PHYS 350	Physics Colloquium
PHYS 371	Methods of Mathematical Physics
ENGR 302	Scientific Computation

## *Courses, University of California, Berkeley (2007 – 2012, As a Lecturer)*

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PHYS (H)7B	Thermodynamics and Electricity and Magnetism for Scientists and Engineers (H: honors)
PHYS 7B	Thermodynamics and Electricity and Magnetism for Scientists and Engineers
PHYS 7C	Modern Physics for Scientists and Engineers
PHYS 8A	Mechanics and Thermodynamics for Life Sciences Majors
PHYS 112	Statistical Mechanics (upper division)
PHYS 137	Quantum Mechanics (upper division)

## *Development of New Courses*

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- The AI series:

1. Introduction to Scientific Computation (PHYS 301)

In 2013, I modernized Computational Physics by introducing Python and scientific libraries. In 2015, I expanded the course to cover relaxation method, Monte Carlo, DFT, PCA, SVM, and renamed it Intro. to Scientific Computation with a lab component. In 2022, I adapted the course for cross-listing as a Master's-level Computer Science class.

2. Scientific Computation & Machine Learning (PHYS 302)

In 2016, I developed a new course that expanded upon PHYS 301, covering advanced topics such as Python decorators, linear regression, neural networks, numerical methods for differential equations, and symbolic computation, also with a lab component. In 2020 and 2023, I adapted and cross-listed the course for the Computer Science and Economics Departments, incorporating more advanced topics including residual neural networks and reinforcement learning.

3. Deep Learning and Bayesian Learning (PHYS 303)

In 2023, I developed a course on Bayesian and deep learning methods, covering topics such as transformers, Bayesian statistics, Hamiltonian Monte Carlo (HMC), latent variables, and multi-dimensional optimization, with an emphasis on fast, robust, and scalable techniques for high-dimensional parameter spaces and large datasets. The first half of the course focuses on

deep learning, the second on Bayesian learning, culminating in their integration. In 2025, it was adapted and cross-listed as a Master’s level course in the Computer Science Department.

- Scientific Computation For Engineers (ENGR 302)
  - 2022: A 2-unit course I developed for the Engineering students, focusing on engineering applications.
- Astrophysics (PHYS 343)
  - 2013: Development of a new cosmology course under an existing course name/number.

## Research

### *Research Highlights*

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Among the biggest questions about the cosmos are the nature of dark energy and dark matter, and the expansion rate of the universe. To unravel these mysteries, I lead the **multi-institutional *DESI Strong Lens Foundry Project*** within the the Dark Energy Spectroscopic Experiment ([DESI](#)), a major DOE program led by the Lawrence Berkeley National Laboratory. I also collaborate with the Supernova Cosmology Project, led by Prof. Perlmutter (Nobel Prize 2011). Using [DESI imaging data](#), my team found over 5000 new strong lens candidates (two new papers to be submitted later year will increase this number to 10,000), with multiple press releases and participation in a press conference. We also developed a state-of-the-art lens modeling pipeline using GPUs. These results have led to a number of successful proposals. I am the PI of a Hubble Space Telescope program with a \$189K NASA grant and we have recently been awarded two additional HST programs, with another  $\sim \$250\text{K}$  in expected NASA funding. I am also the Co-PI or a Co-I of multiple successful proposals to major ground-based telescopes, including at the Keck Observatory and the European Southern Observatory, and to the Nancy Grace Roman Space Telescope (with \$64K NASA grant) and jointly to the Hubble Space Telescope & James Webb Space Telescope. Select results from recent publications can be found on our [project website](#).

### *Peer-reviewed Publications(\* = USF students, underlined)*

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1. S. Agarwal , **X. Huang**, et al. 2025, submitted to ApJ,  
*DESI Strong Lens Foundry III: Keck Spectroscopy for Strong Lenses Discovered Using Residual Neural Networks*
2. **X. Huang**, et al. 2025, submitted to ApJ, [arXiv:2502.03455](#)  
*DESI Strong Lens Foundry I: HST Observations and Modeling with GIGA-Lens*
3. E. Silver, R. Wang, **X. Huang**, A. Bolton, et al., 2025, accepted by ApJ  
*ML-Driven Strong Lens Discoveries: Down to  $\theta_E \sim 0.03''$  and  $M_{\text{halo}} < 10^{11} M_{\odot}$*
4. D. Rubin et al. 2025, ApJ, 986 231  
[Union through UNITY: Cosmology with 2000 SNe Using a Unified Bayesian Framework](#)
5. Bryce Wedig et al. 2025, ApJ, 986, 42  
[The Roman View of Strong Gravitational Lenses](#)
6. Elahe Khalouei et al. 2025, A&A, 698, 266  
[Detection of unresolved strongly lensed supernovae with the 7-Dimensional Telescope](#)
7. J. D. R. Pierel et al. 2024a, ApJ, 967, 50  
[JWST Photometric Time-delay and Magnification Measurements for the Triply Imaged Type Ia “SN H0pe” at  \$z = 1.78\$](#)
8. J. D. R. Pierel et al. 2024b, ApJL 967 L37  
[Lensed Type Ia Supernova “Encore” at  \$z = 2\$ : The First Instance of Two Multiply Imaged Supernovae](#)

9. William Sheu, Aleksandar Cikota, **Xiaosheng Huang** et al., 2024, ApJ, 973, 3  
*The Carousel Lens: A Well-Modeled Strong Lens with Multiple Lensed Sources*
10. William Sheu, **Xiaosheng Huang**, et al., ApJ, 973, 24  
*A Targeted Search for Variable Gravitationally Lensed Quasars*
11. \*C. Storfer, **X. Huang**, et al., 2024, ApJS, 274, 16  
*New Strong Gravitational Lenses from the DESI Legacy Imaging Surveys Data Release 9*
12. \*C. Dawes, C. Storfer, **X. Huang**, G. Aldering, A. Dey, D. J. Schlegel, 2023, ApJS, 269, 61  
*Finding Multiply-Lensed and Binary Quasars in the DESI Legacy Imaging Surveys*
13. A. Cikota, I. Bertolla, **X. Huang**, et al., 2023, ApJL, 953, L5  
*A New Einstein Cross Spectroscopically Confirmed with VLT/MUSE and Modeled with GIGA-Lens*
14. A. Filipp, Y. Shu, R. Pakmor, S. H. Suyu, and **X. Huang**, 2023, A&A, 677, A113  
*Simulation-guided Galaxy Evolution Inference: A Case Study with Strong Lensing Galaxies*
15. D. Langeroodi, et al., 2023, ApJ, 957, 39  
*Evolution of the Mass-Metallicity Relation from Redshift  $z \approx 8$  to the Local Universe*
16. W. Sheu, **X. Huang**, A. Cikota, N. Suzuki, D.J. Schlegel, C. Storfer, ApJ, 952, 10, 2023  
*Retrospective Search for Strongly Lensed Supernovae in the DESI Legacy Imaging Surveys*
17. J.D.R. Pierel, N. Arendse, S. Ertl, **X. Huang**, L. A. Moustakas, S. Schuldt, A. J. Shajib, Y. Shu, S. Birrer, M. Bronikowski, J. Hjorth, S. H. Suyu, et al., 2023, ApJ, 948, 115  
*LensWatch: I. Resolved HST Observations and Constraints on the Strongly-Lensed Type Ia Supernova 2022qmx (“SN Zwicky”)*
18. A. Gu, **X. Huang**, et al., ApJ, 935, 17, 2022  
*GIGA-Lens: Fast Bayesian Inference for Strong Gravitational Lens Modeling*
19. B. Hayden, et al., ApJ, 912, 87, 2021  
*The HST See Change Program: I. Survey Design, Pipeline, and Supernova Discoveries*
20. \***X. Huang**, C. Storfer, A. Gu, V. Ravi, A. Pilon, et al., ApJ, 909, 27, 2021  
*Discovering New Strong Gravitational Lenses in the DESI Legacy Imaging Surveys*
21. \***X. Huang**, M. Domingo, A. Pilon, V. Ravi, C. Storfer, D.J. Schlegel, et al., ApJ, 894, 78, 2020  
*Finding Strong Gravitational Lenses in the DESI DECam Legacy Survey*
22. J. Kim, M.J. Jee, S. Perlmutter, B. Hayden, D. Rubin, **X. Huang**, G. Aldering, J. Ko, ApJ, 887, 76, 2019  
*Precise Mass Determination of SPT-CL J2106-5844, the Most Massive Cluster at  $z > 1$*
23. \*R. Rubin, B. Hayden, X. Huang, ..., Z. Raha, et al., ApJ, 866, 65, 2018  
*The Discovery of a Gravitationally Lensed Supernova Ia at Redshift 2.22*
24. \***X. Huang**, G. Aldering, M. Biederman, and B. Herger, ApJ, 850, 84, 2017  
*On the Time Variation of Dust Extinction and Gas Absorption for Type Ia Supernovae Observed through a Nonuniform Interstellar Medium*
25. \***X. Huang**, Z. Raha, et al., ApJ, 836, 157, 2017  
*The Extinction Properties of and Distance to the Highly Reddened Type Ia Supernova SN 2012cu*
26. J. Nordin, et al., MNRAS, 440, 2742, 2014  
*Lensed Type Ia supernovae as probes of cluster mass models*

27. D. Rubin, et al., ApJ, 763, 35, 2013  
*Precision Measurement of The Most Distant Spectroscopically Confirmed Supernova Ia with the Hubble Space Telescope*
28. N. Suzuki, et al., ApJ, 746, 85, 2012  
*The Hubble Space Telescope Cluster Supernova Survey: V. Improving the Dark Energy Constraints Above  $z > 1$  and Building an Early-Type-Hosted Supernova Sample*
29. K. Barbary, et al., ApJ, 745, 31, 2012  
*The Hubble Space Telescope Cluster Supernova Survey. VI. The Volumetric Type Ia Supernova Rate*
30. K. Barbary, et al., ApJ, 745, 32, 2012  
*The Hubble Space Telescope Cluster Supernova Survey: II. The Type Ia Supernova Rate in High-Redshift Galaxy Clusters*
31. M.J. Jee, et al., ApJ, 737, 59, 2011  
*Scaling Relations and Overabundance of Massive Clusters at  $z \gtrsim 1$  from Weak-lensing Studies with the Hubble Space Telescope*
32. **X. Huang**, et al., ApJL, 707, L12, 2009  
*Hubble Space Telescope Discovery of a  $z = 3.9$  Multiply Imaged Galaxy Behind the Complex Cluster Lens Warps J1415.1+36 at  $z = 1.026$*
33. K.S. Dawson, et al., AJ, 138, 1271, 2009  
*An Intensive HST Survey for  $z > 1$  Type Ia Supernova by Targeting Galaxy Clusters*
34. K. Barbary, K., et al., ApJ, 690, 1358, 2009  
*Discovery of an Unusual Optical Transient with the Hubble Space Telescope*
35. **X. Huang**, et al., 2006, Solid State Communications, 140, 163  
*Pressure Dependence of  $T_c$  and  $H_{c2}$  of a Dirty Two-gap Superconductor, Carbon-doped MgB<sub>2</sub>*
36. **X. Huang**, W. Mickelson, B.C. Regan, and A. Zettl, 2005, Solid State Communications, 136, 278  
*Enhancement of the Upper Critical Field of MgB<sub>2</sub> by Carbon-doping*
37. W. Han, J. Cumings, **X. Huang**, et al., Chemical Physics Letters, 346, 368, 2001  
*Synthesis of Aligned BxCyNz Nanotubes by a Substitutionreaction Route*
38. T. Broadhurst, **X. Huang**, B. Frye, and R. Ellis, ApJL, 534, L15, 2000  
*A Spectroscopic Redshift for the Cl 0024+16 Multiple Arc System: Implications for the Central Mass Distribution*

***Publications in Prep(\* = USF students, underlined)***

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39. \***X. Huang**, Jose Carlos Inchausti, et al., 2025, in prep. (in DESI internal review)  
*DESI Strong Lens Foundry II: DESI Spectroscopy for Strong Lens Candidates*
40. E. Emerald, I. Bertolla, A. Cikota, **X Huang**, et al. 2025, in prep.  
*DESI Strong Lens Foundry IV: Spectroscopic Confirmation of DESI Lens Candidates with VLT/MUSE*
41. **X. Huang**, et al. 2025, in prep.  
*DESI Strong Lens Foundry V: An HST Sample of Strong Lenses Modeled with GIGA-Lens*

***Other Publications***

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- Pierel, J. et al., Transient Name Server AstroNote 2022-196 Multiple Images of SN 2022qmx (“SN Zwicky”) Resolved in HST Observations
- Boone, K. et al., 2016ATel. 9125 SCP16L01: discovery of an unusual transient in MOO-J1142

### *Principal-Investigator, Successful Telescope Proposals*

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- PI, Hubble Space Telescope, 2025: [Confirming Spectroscopic Strong Lenses Found in New Discovery Windows from DESI DR1](#)
- PI, Hubble Space Telescope, 2025: [Finding Low Halo Mass Strong Lenses in HST Archive](#)
- PI, Hubble Space Telescope, 2019: [Confirming Strong Galaxy Gravitational Lenses in the DESI Legacy Imaging Surveys](#)
- Co-PI, [Keck Observatory](#), 2022 - 2025: Strong Lensing Redshifts and Modeling for Dark Matter Low-Mass Halo Detection
- Co-PI, [DESI](#) Secondary Target Program, 2021, 2024: Spectroscopic Confirmation of Strong Gravitational Lens Candidates in DESI

### *Co-Investigator, Successful Telescope Proposals*

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- Hubble Space Telescope:
  - 2024, [Confirming Spectroscopic Strong Lens Candidates from the DESI One-Percent Survey](#) (PI: A. Bolton)
  - 2024, [An Automated Pipeline for Modeling of Strong Gravitational Lenses Observed by HST](#) (PI: C. Storfer)
  - 2022 (Cycle 30), Imaging and Spectroscopy of Three Highly Magnified Images of a Supernova at  $z=1.5$  (PI: P. Kelly, University of Minnesota)
  - 2020 (Cycle 28), [LensWatch: Time Delay Measurement of a Multiply-Imaged Supernova](#) (PI: J. Pierel, Space Telescope Science Institute)
  - 2016/2017 (Cycle 24, 25), [SUbaru Supernovae with Hubble Infrared \(SUSHI\)](#) (PI: N. Suzuki, Institute for the Physics and Mathematics of the Universe)
  - 2014/2015 (Cycle 22, 23), [See Change: Testing time-varying dark energy with  \$z > 1\$  supernovae and their massive cluster hosts](#) (PI: S. Perlmutter, Lawrence Berkeley National Laboratory)
- [Alma APEX](#):
  - 2024, ASADOS: APEX ScAvenger hunt for lenseD gas-rich ObjectS (PI: Kevin Harrington)
- Nancy Grace Roman Space Telescope:
  - 2023 ([NASA ROSES-D.14](#), approved), Enabling Lensed SN Cosmology with the Roman Space Telescope (PI: J. Pierel, Space Telescope Science Institute)
- Joint Hubble Space Telescope & James Webb Space Telescope Program:
  - 2023, [Pioneering Precision: Advancing Cosmology with the First Statistical Sample of Gravitationally Lensed Supernovae](#) (PI: J. Pierel, Space Telescope Science Institute)
- James Webb Space Telescope:
  - 2022 (Cycle 1), [Imaging and Spectroscopy of Three Highly Magnified Images of a Supernova at  \$z=1.5\$](#)  (Together with the Hubble Telescope Program below; PI: P. Kelly, University of Minnesota)
- [Very Large Telescope, European Southern Observatory](#):
  - 2023, Characterization of galaxy-galaxy gravitational lens systems with MUSE (PI: A. Cikota NSF's NOIRLab)

- 2022, High-redshift mass assembly with DESI strong-lensing (PI: Eric Jullo, Laboratoire d’Astrophysique de Marseille)
- 2021 & 2022, A Filler Program for the Apocalypse: end all weather-idle-time on UT4 (PI: F. Bian, European Southern Observatory)
- [NSF’s NOIRLab Dark Energy Camera \(DECam\) on the Blanco Telescope](#):
  - 2023, DECam Survey for Gravitational Wave O4 Follow-up (PIs: I. Andreoni & A. Palmese, Carnegie Mellon University)
  - 2023, DECaLS Extended Imaging Survey (PI: D. Schlegel, Lawrence Berkeley National Laboratory)
  - 2022 & 2023 DESIRT: DECam Survey for Intermediate-redshift Transients (PI: A. Palmese, Carnegie Mellon University)
- Keck Observatory: multiple proposals, 2010 – 2018

## Service

### *Service Highlights*

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I have mentored over 50 undergraduate students, from USF and other universities, in research projects. For the mentoring work I did that involved students in the Department of Energy [SULI](#) program, I was recognized with the [Outstanding Mentors Award](#) of 2021. In addition to my mentoring work, I lead the [DESI](#) Strong Lens Foundry Project with researchers from multiple institutions.

### *Service to University/College*

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- Curriculum development, the Engineering Department: 2016 –
  - Joint appointment in the Engineering Department: 2020 –
- Committees
  - Dean’s Award Review Committee, 2025
  - Distinguished Research Committee: member, 2014; Chair, 2015 & 2016
  - Honorary Degree Committee: 2014 – 2018
  - Learning Technologies Subcommittee: 2015 – 2018
  - Learning Analytics Subcommittee: 2017 – 2018
- Destination USF Mock Class (for prospective students): 2016

### *Service to Department/Students*

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- Mentoring Student Research:
  - Supervision for USF student research projects: every year since 2013, which resulted in multiple peer-reviewed papers with USF students as co-authors in The Astrophysical Journal (ApJ),
  - USF Department of Computer Science, Master of Science Capstone Project mentor: 2018, 2019, and 2022.
  - Supervision for student research presentations
    - \* American Astronomical Society Annual Meeting 2020



- \* Poster presentations at the USF Creative Activity & Research Day (CARD): 2014, 2015, 2018, 2019, 2023, 2024
- \* Posters at multiple university and College of Arts & Sciences events: Dean’s Circle Event and Poster Session 2022; USF President’s Inauguration 2014; USF Changing the World through Science and Innovation Symposium 2013.
- Guidance for a successful student proposal for the USF Summer Research Fellowship: 2015
- The Engineering Physics Minor Program: since 2016, a total of 22 students granted the Minor
- Applied AI Minor Program (starting in Fall 2025)
- Other Service:
  - Faculty Search Committees (tenure lines): 2016, 2018

### *Professional Activities & Service*

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- 2019 –: Leading an international research collaboration from multiple institutions: the DESI Strong Lens Foundry
- 2013 –: Being a hands-on mentor in summer internship programs at the Lawrence Berkeley National Laboratory for students from USF, UC Berkeley, Princeton University, the University of Chicago, National Taiwan University, Rose-Hulman Institute of Technology, Complutense University of Madrid. Some of these students are in the [Department of Energy \(DOE\) SULI](#) program. My mentoring in the SULI program resulted in being given the [Outstanding Mentors Award](#) from the Lawrence Berkeley National Laboratory in 2021. One student was given the Department of Energy National Energy Research Scientific Computing Center (NERSC) [Early Career Award in 2022](#) and another student was featured in an Department of Energy Workforce Development and Education (WD&E) [article in 2021](#).
- PhD Thesis Committee, the Institute for Astronomy at the University of Hawai’i: 2023 –
- Senior Thesis Committee, Yale University: 2024-2025
- Hubble Space Telescope proposal reviewer: MidCycle 27, Main Cycle 29
- Journal Referee (Impact Factor):
  - *Nature Astronomy* (15.6)
  - *Space Science Review* (9.5)
  - *The Astrophysical Journal Supplement Series* (9.2)
  - *The Astronomical Journal* (6.2)
  - *Monthly Notices of the Royal Astronomical Society* (5.2)
- Presentation at the workshop for the Department of Energy’s Visiting Faculty Program at the Lawrence Berkeley National Laboratory: 2022, 2024, 2025
- Presentation at the Department of Energy’s Visiting Faculty Program Alumni Panel Discussion: 2023
- Conference Presentations:
  - Science with strong lensing, ALMA and next generation radio interferometry, National Radio Astronomy Observatory (NRAO), Charlottesville, VA, May, 2025
  - Strong Gravitational Lensing Science Conference, Center for Astrophysics (CfA), Harvard/Smithsonian, March, 2025
  - Strong Gravitational Lensing Science with LSST in Oxford, UK: 2024



- The DESI Collaboration Meeting in Durham, UK: 2023
- Poster presentations at American Astronomical Society (AAS) annual meeting: 2014, 2016, 2017, 2018, 2019, 2020, 2021
- The [Nearby Supernova Factory](#) Collaboration Meeting in Clermont-Ferrand, France: 2017
- Judge for the Chambliss Astronomy Achievement Student Awards, American Astronomical Society annual meeting: 2017
- Speaker at the Astronomy Career Development Seminar, UC Berkeley: 2016
- Member of the American Astronomical Society

### *Invited Talks*

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- Colloquium, Department of Physics, Santa Clara University, April, 2025
- Cosmology Seminar, Department of Physics and Astronomy, University of California, Davis, March, 2025
- Colloquium, Department of Physics and Astronomy, University of Rochester, September, 2024
- Colloquium, Department of Physics and Astronomy, University of San Francisco, November, 2023
- Machine Learning Seminar, Lawrence Berkeley National Laboratory, Physics Division, December 2022
- [Kavli Institute for Particle Astrophysics and Cosmology, Stanford University, April, 2022](#)
- [Data Seminar, the National Energy Research Scientific Computing Center \(NERSC\), April, 2022](#)
- Seminar, Lawrence Berkeley National Laboratory, Physics Division, May, 2021
- Astrophysics Seminar, Department of Physics, Florida State University, April, 2020
- Colloquium, Department of Physics and Astronomy, University of San Francisco, April, 2017
- Colloquium, Department of Physics and Astronomy, San Jose State University, October, 2016
- Public Lecture: Wonderfest, Bay Area Beacon of Science (Mt. Tamalpais), August, 2016.
- [Department of Physics & Astronomy, Sonoma State University “What Physicists Do” Series, April, 2015](#)