Catherine Zucker

Center for Astrophysics | Harvard & Smithsonian catherine.zucker@cfa.harvard.edu

Last Updated: April 2020

EDUCATION

Harvard University: PhD in Astronomy	2017 - 2020
Dissertation: Charting our Uncharted Milky Way	
Advisors: Alyssa Goodman & Douglas Finkbeiner	
Harvard University: M.A. in Astronomy and Astrophysics	2015 - 2017
University of Virginia: B.A. in Astronomy-Physics and B.A. in History	2011 - 2015

RESEARCH INTERESTS

My research focuses on developing novel techniques to tease out the true 3D structure of our Galaxy. I use a combination of observations, simulations, astrostatistics, and data visualization to gain new insight into the nature and structure of our Milky Way's interstellar medium. Some of my research highlights include:

- Producing the largest and most accurate map of stellar nurseries in our solar neighborhood
- The discovery of the *Radcliffe Wave*, a 2.7 kpc long sinuosoidal structure which redefines the shape of the Local Arm in our Galaxy. Press.
- Knitting together gas and dust observations to produce high-resolution 4D views of nearby molecular clouds
- Characterizing the physical properties of the largest-scale filaments in the interstellar medium of our Galaxy via observations and simulations
- Biq Data, bayesian statistics, statistical computing, and interactive data visualization

PUBLICATIONS

I have co-authored 16 publications, including eight as (co-) first author. A full listing of my publications can be found on ADS.

First Author/co-PI

- 1. **Zucker**, C, Speagle, J; Schlafly, E.; Green, G.; Finkbeiner, D.; Goodman, A.; Alves, J. 2020. A&A. 633, A51. A Compendium of Distances to Molecular Clouds in the Star Formation Handbook.
- 2. **Zucker**, C; Smith, R.; Goodman, A. 2019. ApJ, 887, 186. Synthetic Large-Scale Galactic Filaments on their Formation, Physical Properties, and Resemblance to Observations.
- 3. **Zucker**, C & Speagle, J; Schlafly, E.; Green, G.; Finkbeiner, D.; Goodman, A.; Alves, J. 2019. *ApJ*, 879, 125. A Large Catalog of Accurate Distances to Local Molecular Clouds: The Gaia DR2 Edition
- 4. **Zucker, C**; Schlafly, E.; Green, G.; Speagle, J.; Portillo, S.; Finkbeiner, D.; Goodman, A. 2018c. *ApJ*, 869, 83. Mapping Distances across the Perseus Molecular Cloud Using CO Observations, Stellar Photometry, and Gaia DR2 Parallax Measurements.
- 5. **Zucker**, C & Chen, H. H. 2018b. *ApJ*, 864, 162. RadFil: A Python Package for Building and Fitting Radial Profiles for Interstellar Filaments.
- 6. **Zucker**, **C**; Battersby, C.; Goodman, A. 2018a. *ApJ*, 864, 2. The Physical Properties of Large-scale Galactic Filaments.

- 7. **Zucker, C**; Walker, L.M..; Johnson, K.; Gallagher, S.; Alatalo, K.; Tzanavaris, P. 2016. *ApJ*, 821, 113. Hierarchical Formation in Action: Characterizing Accelerated Galaxy Evolution in Compact Groups using Whole-Sky WISE Data.
- 8. **Zucker**, C; Battersby, C.; Goodman, A. 2015. ApJ, 815, 23. The Skeleton of the Milky Way.

Contributing Author

- Wang, Y., Beuther, H., Schneider, N., Meidt, S., Linz, H., Ragan, S., Zucker, C, Battersby, C., Soler, J., Schinnerer, E., Bigiel, F., Colombo, D. and Henning T. 2020. A&A. Submitted. Dense Gas in a Giant Molecular Filament
- 2. Alves, J., **Zucker, C.**, Goodman, A., Speagle, J., Meingast, S., Robitaille, T., Finkbeiner, D., Schlafly, E., Green, G. 2020. *Nature*. A Galactic-scale gas wave in the Solar Neighborhood.
- 3. Smith, R. J., Tress, R., Sormani, C., Clover, S. Klessen, R., Clark, P., Izquierdo, A., Duarte-Cabral, A., **Zucker, C.**. 2019. MNRAS. Accepted. The Cloud Factory I: Generating resolved filamentary molecular clouds from galactic-scale forces
- 4. Green, G.; Schlafly, E.; **Zucker, C.**; Speagle, J.; Finkbeiner, D. 2019. MNRAS, 887, 93. A 3D Dust Map Based on Gaia, Pan-STARRS 1 and 2MASS.
- 5. Fissel, L. & 39 co-authors, including **Zucker**, C. 2019. ApJ, 878, 110. Relative Alignment between the Magnetic Field and Molecular Gas Structure in the Vela C Giant Molecular Cloud Using Low- and High-density Tracers.
- 6. Monsch, K.; Pineda, J.; Liu, H.B., **Zucker, C.**, H.; Chen, H.; Pattle, K.; Offner, S.; Di Francesco, J.; Ginsburg, A.; Ercolano, B.; Arce, H.; Friesen, R.; Kirk, H.; Caselli, P.; Goodman, A. 2018. *ApJ*, 861, 77. Dense Gas Kinematics and a Narrow Filament in the Orion A OMC1 Region using NH₃.
- 7. Lisenfeld, U.; Alatalo, K.; **Zucker, C.**; Appleton, P. N.; Gallagher, S.; Guillard, P.; Johnson, K.. 2017. A & A, 607, A110. The role of molecular gas in galaxy transition in compact groups
- 8. Walker, L.M.; Butterfield, N.; Johnson, K.; **Zucker, C.**; Gallagher, S.; Konstantopoulos, I., Hornschemeier, A.; Tzanavaris, P.; Charlton, J. 2013. *ApJ*, 775,129. The Optical Green Valley vs Mid-IR Canyon in Compact Groups

Unrefereed

1. Invited *Perspective* article for the February 2020 issue of the Star Formation Newsletter. Distances to Star-Forming Regions

PRESENTATIONS

I have given a total of 23 talks, including 6 invited talks.

Talks

1. Lunch Seminar, Harvard Astrostatistics Group (Harvard University)	March 2020
2. Lunch Seminar, University of Washington (Seattle, Washington)	February 2020
3. Contributed Talk, NE Regional Star Formation Meeting (UConn)	January 2020
4. Invited Colloquium, AMNH (New York, New York)	December 2019
5. Contributed Talk, Harvard-Heidelberg Meeting on Star Formation (Cambridge, MA)	November 2019
6. Invited Talk, The self-organized star formation process (Orsay, France)	October 2019

8. Invited Colloquium, SAO REU Summer Colloquium Series (Harvard CfA) 9. Contributed Talk, New England Regional SF Meeting (UMass) 10. Contributed Talk, Harvard Heidelberg Meeting on Star Fornation (MPIA) 11. Invited Talk, Interstellar Filament Paradigm (Nagoya, Japan) 12. Contributed Talk, Interstellar Filament Paradigm (Nagoya, Japan) 13. Invited Talk, The Milky Way in the Age of Gaia (Orsay, France) 14. Invited Talk, The Milky Way in the Age of Gaia (Orsay, France) 15. Contributed Talk, the Olympian Symposium (Paralia, Greece) 16. Contributed Talk, the Olympian Symposium (Paralia, Greece) 17. Contributed Talk, Say, Stars, and Galaxies (U. Manchester, UK) 18. Contributed Talk, Sun, Stars, and Galaxies (U. Manchester, UK) 19. Contributed Talk, Barvard Astrostats Day (Harvard CfA) 19. Contributed Talk, Dunlap Institute (Toronto, Canada) 10. Contributed Talk, Dunlap Institute (Toronto, Canada) 10. Contributed Talk, New England Region SF Meeting 10. Contributed Talk, Filamentary Structure in Molecular Clouds (Charlottesville, VA) 10. Contributed Talk, Filamentary Structure in Molecular Clouds (Charlottesville, VA) 10. Contributed Talk, Filamentary Structure in Molecular Clouds (Charlottesville, VA) 10. Contributed Talk, Filamentary Structure in Molecular Clouds (Charlottesville, VA) 10. Contributed Talk, Filamentary Structure in Molecular Clouds (Charlottesville, VA) 10. Contributed Talk, Filamentary Structure in Molecular Clouds (Charlottesville, VA) 10. Contributed Talk, Filamentary Structure in Molecular Clouds (Charlottesville, VA) 10. Contributed Talk, Filamentary Structure in Molecular Clouds (Charlottesville, VA) 10. Contributed Talk, Filamentary Structure in Molecular Clouds (Charlottesville, VA) 10. Contributed Talk, Filamentary Structure in Molecular Clouds (Charlottesville, VA) 10. Contributed Talk, Filamentary Structure in Molecular Clouds (Charlottesville, VA) 10. Contributed Talk, Filamentary Structure in Molecular Clouds (Charlottesville, VA) 10. Contributed Talk, Filamentary Structure in Molecular	7. Contributed Talk, Crete III – Through dark lanes to new stars (Heraklion, Contributed Talk, Crete III – Through dark lanes to new stars (Heraklion, Contributed Talk, Crete III – Through dark lanes to new stars (Heraklion, Contributed Talk, Crete III – Through dark lanes to new stars (Heraklion, Contributed Talk, Crete III – Through dark lanes to new stars (Heraklion, Contributed Talk, Crete III – Through dark lanes to new stars (Heraklion, Contributed Talk, Crete III – Through dark lanes to new stars (Heraklion, Contributed Talk, Crete III – Through dark lanes to new stars (Heraklion, Contributed Talk, Crete III – Through dark lanes to new stars (Heraklion, Contributed Talk, Crete III – Through dark lanes to new stars (Heraklion, Contributed Talk, Crete III – Through dark lanes to new stars (Heraklion, Contributed Talk, Crete III – Through dark lanes to new stars (Heraklion, Contributed Talk, Crete III – Through dark lanes to new stars (Heraklion, Contributed Talk, Crete III – Through dark lanes to new stars (Heraklion, Contributed Talk, Crete III – Through dark lanes to new stars (Heraklion, Contributed Talk, Crete III – Through dark lanes to new stars (Heraklion, Crete III – Through dark lanes to new stars (Heraklion, Crete III – Through dark lanes to new stars (Heraklion, Crete III – Through dark lanes to new stars (Heraklion, Crete III – Through dark lanes to new stars (Heraklion, Crete III – Through dark lanes to new stars (Heraklion, Crete III – Through dark lanes to new stars (Heraklion, Crete III – Through dark lanes to new stars (Heraklion, Crete III – Through dark lanes to new stars (Heraklion, Crete III – Through dark lanes to new stars (Heraklion, Crete III – Through dark lanes to new stars (Heraklion, Crete III – Through dark lanes to new stars (Heraklion, Crete III – Through dark lanes (Heraklion, Crete III – Through dark lan	Crete) September 2019
9. Contributed Talk, New England Regional SF Meeting (UMass) 10. Contributed Talk, Harvard Heidelberg Meeting on Star Formation (MPIA) 11. Invited Talk, ITC Luncheon (Harvard CfA) 12. Contributed Talk, Interstellar Filament Paradigm (Nagoya, Japan) 13. Invited Talk, TTC Luncheon (Harvard CfA) 14. Invited Talk, TTC Luncheon (Harvard CfA) 15. Contributed Talk, MIT Haystack 16. Contributed Talk, MIT Haystack 17. Contributed Talk, MIT Haystack 18. Contributed Talk, Sun, Stars, and Calaxies (U. Manchester, UK) 18. Contributed Talk, Sun, Stars, and Calaxies (U. Manchester, UK) 19. Contributed Talk, Sun, Stars, and Calaxies (U. Manchester, UK) 19. Contributed Talk, Galactic Star Formation with Survey (MPIA) 19. Contributed Talk, Dunlap Institute (Toronto, Canada) 19. Contributed Talk, England Region SF Meeting 20. Contributed Talk, Filamentary Structure in Molecular Clouds (Charlottesville, VA) 21. Contributed Talk, Filamentary Structure in Molecular Clouds (Charlottesville, VA) 22. Contributed Talk, Filamentary Structure in Molecular Clouds (Charlottesville, VA) 23. Talk, SAO Astronomy Intern Symposium (Harvard CfA) **ELECTED AWARDS **I Harvard-Horizons 2020 Scholar Top eight graduate students selected across Harvard to receive professional development training, culminating in public "TED-style" talk **Certificate of Distinction in Teaching, Harvard University **Certificate of Distinction in Teaching, Harvard University **I Harvard Astronomy Departmental Teaching Award **Certificate of Distinction in Teaching, Harvard University **I Asserna School for Data Science Full Scholarship **NSF Graduate Research Fellowship Award **Supports outstanding graduate students in NSF-supported science disciplines* **John P. and Carol J. Merrill Graduate Fellowship, Harvard University **Peirce Fellowship, Harvard Astronomy **Awarded to one outstanding third year astrophysics major at the University of Virginia **Prince Fellowship For top three admitted Harvard Astronomy applicants **UVA Undergraduate Physics Research Sy		,
10. Contributed Talk, Harvard Heidelberg Meeting on Star Fornation (MPIA) 11. Invited Talk, ITC Luncheon (Harvard CfA) 12. Contributed Talk, Itterstellar Filament Paradigm (Nagoya, Japan) 13. Invited Talk, The Milky Way in the Age of Gaia (Orsay, France) 14. Invited Talk, The Milky Way in the Age of Gaia (Orsay, France) 15. Contributed Talk, the Olympian Symposium (Paralia, Greece) 16. Contributed Talk, the Olympian Symposium (Paralia, Greece) 17. Contributed Talk, Sun, Stars, and Galaxies (U. Manchester, UK) 18. Contributed Talk, Sun, Stars, and Galaxies (U. Manchester, UK) 19. Contributed Talk, Galactic Star Formation with Survey (MPIA) 19. Contributed Talk, Dunlap Institute (Toronto, Canada) 19. Contributed Talk, New England Region SF Meeting 20. Contributed Talk, New England Region SF Meeting 21. Contributed Talk, Filamentary Structure in Molecular Clouds (Charlottesville, VA) 22. Contributed Talk, Filamentary Structure in Molecular Clouds (Charlottesville, VA) 23. Talk, SAO Astronomy Intern Symposium (Harvard CfA) 24. Contributed Talk, Filamentary Structure in Molecular Clouds (Charlottesville, VA) 25. Contributed Talk, Filamentary Structure in Molecular Clouds (Charlottesville, VA) 26. Certificate of Distinction in Teaching, Harvard university 27. Spring 202 28. Contributed Talk, Sand Astronomy Departmental Teaching Award 28. Spring 202 29. Contributed Talk, Filamentary Calminating in public "TED-style" talk 29. Certificate of Distinction in Teaching, Harvard University 30. Spring 201 31. La Serena School for Data Science Full Scholarship 40. Certificate of Distinction in Teaching, Harvard University 41. La Serena School for Data Science Full Scholarship 42. New Tener School, Harvard Astronomy Applicants 43. John P. and Carol J. Merrill Graduate Fellowship, Harvard University 44. Fall 2015-Spring 201 45. Pall 2015-Fall 201 46. Vyssotsky Prize, University of Virginia Astronomy Applicants 46. UVA Undergraduate Physics Research Symposium, 1st Place 47. Vyssotsky Prize, University of Virginia Astronomy Awarde		
11. Invited Talk, ITC Luncheon (Harvard CfA) 12. Contributed Talk, Interstellar Filament Paradigm (Nagoya, Japan) 13. Invited Talk, The Milky Way in the Age of Gaia (Orsay, France) 14. Invited Talk, The Milky Way in the Age of Gaia (Orsay, France) 15. Contributed Talk, the Olympian Symposium (Paralia, Greece) 16. Contributed Talk, AAS Splinter Session (Washington, DC) 17. Contributed Talk, San, Stars, and Galaxies (U. Manchester, UK) 18. Contributed Talk, Harvard Astrostats Day (Harvard CfA) 19. Contributed Talk, Galactic Star Formation with Survey (MPIA) 20. Contributed Talk, Dunlap Institute (Toronto, Canada) 21. Contributed Talk, New England Region SF Meeting 22. Contributed Talk, Filamentary Structure in Molecular Clouds (Charlottesville, VA) 23. Talk, SAO Astronomy Intern Symposium (Harvard CfA) 24. Contributed Talk, Filamentary Structure in Molecular Clouds (Charlottesville, VA) 25. Contributed Talk, See England Region SF Meeting 26. Contributed Talk, See England Region SF Meeting 27. Contributed Talk, See England Region SF Meeting 28. Harvard-Horizons 2020 Scholar Top eight graduate students selected across Harvard to receive professional development training, culminating in public "TED-style" talk 28. Certificate of Distinction in Teaching, Harvard University 29. Fall 2015 20. Fall 2016-Spring 201 20. La Serena School for Data Science Full Scholarship 20. NSF Graduate Research Fellowship Award 20. Fall 2016-Spring 202 20. Fall 2015-Spring 202 20. Fall 2015-Spring 202 20. Fall 2015-Spring 203 20. Fall 2015-Spring 204 20. Talk, See Grand Consolvitum Research Fellowship 20. Fall 2015-Spring 201 20. Fall 2015-Spring 201		
12. Contributed Talk, Interstellar Filament Paradigm (Nagoya, Japan) 13. Invited Talk, The Milky Way in the Age of Gaia (Orsay, France) 14. Invited Talk, MTT Haystack 15. Contributed Talk, the Olympian Symposium (Paralia, Greece) 16. Contributed Talk, the Olympian Symposium (Paralia, Greece) 17. Contributed Talk, Sun, Stars, and Galaxies (U. Manchester, UK) 18. Contributed Talk, Harvard Astrostats Day (Harvard CfA) 19. Contributed Talk, Galactic Star Formation with Survey (MPIA) 19. Contributed Talk, Galactic Star Formation with Survey (MPIA) 20. Contributed Talk, New England Region SF Meeting 21. Contributed Talk, New England Region SF Meeting 22. Contributed Talk, Filamentary Structure in Molecular Clouds (Charlottesville, VA) 23. Talk, SAO Astronomy Intern Symposium (Harvard CfA) 24. Contributed Talk, Filamentary Structure in Molecular Clouds (Charlottesville, VA) 25. Contributed Talk, Filamentary Structure in Molecular Clouds (Charlottesville, VA) 26. Contributed Talk, Filamentary Structure in Molecular Clouds (Charlottesville, VA) 27. Talk, SAO Astronomy Intern Symposium (Harvard CfA) 28. Filamentary Structure in Molecular Clouds (Charlottesville, VA) 29. Cortificate of Distinction in Teaching, Harvard to receive professional development training, culminating in public "TED-style" talk 20. Certificate of Distinction in Teaching, Harvard University 20. Certificate of Distinction in Teaching, Harvard University 21. La Serena School for Data Science Full Scholarship 22. Supports outstanding graduate students in NSF-supported science disciplines 23. John P. and Carol J. Merrill Graduate Fellowship, Harvard University 24. Peirce Fellowship, Harvard Astronomy 25. Fall 2015-Spring 201 26. Peirce Fellowship, Harvard Astronomy 26. Peirce Fellowship, Harvard Astronomy 27. Awarded to one outstanding third year astrophysics major at the University of Virginia 28. Ouble Hoo Research Award, University of Virginia 29. Uvla Undergraduate Physics Research Fellowship 20. Lintermediate Honors,	, , , , , , , , , , , , , , , , , , , ,	November 2018
13. Invited Talk, The Milky Way in the Age of Gaia (Orsay, France) 14. Invited Talk, MIT Haystack 15. Contributed Talk, the Olympian Symposium (Paralia, Greece) 16. Contributed Talk, the Olympian Symposium (Paralia, Greece) 17. Contributed Talk, Sun, Stars, and Galaxies (U. Manchester, UK) 18. Contributed Talk, Harvard Astrostats Day (Harvard CfA) 19. Contributed Talk, Galactic Star Formation with Survey (MPIA) 20. Contributed Talk, Dunlap Institute (Toronto, Canada) 21. Contributed Talk, New England Region SF Meeting 22. Contributed Talk, Flamentary Structure in Molecular Clouds (Charlottesville, VA) 23. Talk, SAO Astronomy Intern Symposium (Harvard CfA) 24. Contributed Talk, Flamentary Structure in Molecular Clouds (Charlottesville, VA) 25. Contributed Talk, Flamentary Structure in Molecular Clouds (Charlottesville, VA) 26. Contributed Talk, Flamentary Structure in Molecular Clouds (Charlottesville, VA) 27. Talk, SAO Astronomy Intern Symposium (Harvard CfA) 28. Spring 202 29. Contributed Talk, James Selected across Harvard to receive professional development training, culminating in public "TED-style" talk 29. Certificate of Distinction in Teaching, Harvard University 20. Spring 201 21. La Screna School for Data Science Full Scholarship 22. Spring 201 23. Talk, SAO Astronomy Departmental Teaching Award 24. Supports outstanding graduate students in NSF-supported science disciplines 25. John P. and Carol J. Merrill Graduate Fellowship, Harvard University 26. Peirce Fellowship, Harvard Astronomy 27. Fall 2015-Spring 201 28. Peirce Fellowship for top three admitted Harvard Astronomy applicants 29. UVA Undergraduate Physics Research Symposium, 1st Place 20. Vyssotsky Prize, University of Virginia Spring 201 21. Novelle Hoo Research Award, University of Virginia 28. Spring 201 29. Novelle Hoo Res		November 2018
14. Invited Talk, MIT Haystack 15. Contributed Talk, the Olympian Symposium (Paralia, Greece) 16. Contributed Talk, AAS Splinter Session (Washington, DC) 17. Contributed Talk, Sun, Stars, and Galaxies (U. Manchester, UK) 18. Contributed Talk, Sun, Stars, and Galaxies (U. Manchester, UK) 19. Contributed Talk, Galactic Star Formation with Survey (MPIA) 19. Contributed Talk, Dunlap Institute (Toronto, Canada) 20. Contributed Talk, Dunlap Institute (Toronto, Canada) 21. Contributed Talk, Filamentary Structure in Molecular Clouds (Charlottesville, VA) 22. Contributed Talk, Filamentary Structure in Molecular Clouds (Charlottesville, VA) 23. Talk, SAO Astronomy Intern Symposium (Harvard CfA) 4 August 201 4 Harvard-Horizons 2020 Scholar 4 Top eight graduate students selected across Harvard to receive 4 professional development training, culminating in public "TED-style" talk 5 Certificate of Distinction in Teaching, Harvard University 5 Spring 201 6 La Serena School for Data Science Full Scholarship 7 Spring 201 8 NSF Graduate Research Fellowship Award 8 Spring 202 8 Supports outstanding graduate students in NSF-supported science disciplines 9 John P. and Carol J. Merrill Graduate Fellowship, Harvard University 9 Fall 2016-Spring 202 8 Supports outstanding graduate students in NSF-supported science disciplines 9 UVA Undergraduate Physics Research Symposium, 1st Place 9 Peirce Fellowship, Harvard Astronomy 1 Internal fellowship for top three admitted Harvard Astronomy applicants 9 UVA Undergraduate Physics Research Symposium, 1st Place 10 Vyssotsky Prize, University of Virginia Astronomy Awarded to one outstanding third year astrophysics major at the University of Virginia 10 Noble Hoo Research Award, University of Virginia Fall 201 11 Numer 2013-Spring 201 12 Kate Cabell Claiborne Cox Scholarship, University of Virginia History 13 Summer 2013-Spring 201 14 Kate Cabell Claiborne Cox Scholarship, University of Virginia History 14 Summer 2013-Spring 201		October 2018
15. Contributed Talk, the Olympian Symposium (Paralia, Greece) 16. Contributed Talk, AAS Splinter Session (Washington, DC) 17. Contributed Talk, Sun, Stars, and Galaxies (U. Manchester, UK) 18. Contributed Talk, Harvard Astrostats Day (Harvard CfA) 19. Contributed Talk, Galactic Star Formation with Survey (MPIA) 20. Contributed Talk, Dunlap Institute (Toronto, Canada) 21. Contributed Talk, Dunlap Institute (Toronto, Canada) 22. Contributed Talk, Filamentary Structure in Molecular Clouds (Charlottesville, VA) 23. Talk, SAO Astronomy Intern Symposium (Harvard CfA) 24. Talk, SAO Astronomy Intern Symposium (Harvard CfA) 25. ELECTED AWARDS 26. Harvard-Horizons 2020 Scholar Top eight graduate students selected across Harvard to receive professional development training, culminating in public "TED-style" talk 26. Certificate of Distinction in Teaching, Harvard University 27. Harvard Astronomy Departmental Teaching Award 28. Certificate of Distinction in Teaching, Harvard University 29. La Serena School for Data Science Full Scholarship 20. NSF Graduate Research Fellowship Award 20. NSF Graduate Research Fellowship Award 20. NSF Graduate Research Fellowship Award 20. Peirce Fellowship, Harvard Astronomy 20. Peirce Fellowship, Harvard Astronomy 20. Peirce Fellowship, Harvard Astronomy 20. Peirce Fellowship for top three admitted Harvard Astronomy applicants 20. UVA Undergraduate Physics Research Symposium, 1st Place 20. Vyssotsky Prize, University of Virginia Astronomy 20. Awarded to one outstanding third year astrophysics major at the University of Virginia 20. Pouble Hoo Research Award, University of Virginia History 20. Kate Cabell Claiborne Cox Scholarship, University of Virginia History 20. Summer 2013-Spring 201 20. Kate Cabell Claiborne Cox Scholarship, University of Virginia Summer 2013-Spring 201 20. Harrison Undergraduate Research Award, University of Virginia 20. Summer 2013-Spring 201		August, 2018
16. Contributed Talk, AAS Splinter Session (Washington, DC) 17. Contributed Talk, Sun, Stars, and Galaxies (U. Manchester, UK) 18. Contributed Talk, Harvard Astrostats Day (Harvard CfA) 19. Contributed Talk, Galactic Star Formation with Survey (MPIA) 20. Contributed Talk, Dunlap Institute (Toronto, Canada) 21. Contributed Talk, New England Region SF Meeting 22. Contributed Talk, Filamentary Structure in Molecular Clouds (Charlottesville, VA) 23. Talk, SAO Astronomy Intern Symposium (Harvard CfA) 24. Contributed Talk, Filamentary Structure in Molecular Clouds (Charlottesville, VA) 25. Contributed Talk, Filamentary Structure in Molecular Clouds (Charlottesville, VA) 26. Cottober 201 27. Contributed Talk, Filamentary Structure in Molecular Clouds (Charlottesville, VA) 28. Cottober 201 29. Contributed Talk, Filamentary Structure in Molecular Clouds (Charlottesville, VA) 20. Cottober 201 20. Contributed Talk, Filamentary Structure in Molecular Clouds (Charlottesville, VA) 21. Cottober 201 22. Contributed Talk, Filamentary Structure in Molecular Clouds (Charlottesville, VA) 22. Contributed Talk, Filamentary Structure in Molecular Clouds (Charlottesville, VA) 23. Talk, SAO Astronomy Intern Symposium (Harvard CfA) 24. August 201 25. ELECTED AWARDS 26. Harvard-Horizons 2020 Scholar 26. Certificate of Distinction in Teaching, Harvard University 27. Spring 201 28. Certificate of Distinction in Teaching, Harvard University 28. Spring 201 29. NSF Graduate Research Fellowship Award 20. NSF Graduate Research Fellowship, Harvard University 20. NSF Graduate Research Fellowship, Harvard University 20. Peirce Fellowship, Harvard Astronomy 20. Peirce Fellowship, Harvard Astronomy 20. Fall 2015-Spring 201 20. Peirce Fellowship, Harvard Astronomy 20. P	,	May 2018
17. Contributed Talk, Sun, Stars, and Galaxies (U. Manchester, UK) 18. Contributed Talk, Harvard Astrostats Day (Harvard CfA) 19. Contributed Talk, Galactic Star Formation with Survey (MPIA) 20. Contributed Talk, Dunlap Institute (Toronto, Canada) 21. Contributed Talk, New England Region SF Meeting 22. Contributed Talk, Filamentary Structure in Molecular Clouds (Charlottesville, VA) 23. Talk, SAO Astronomy Intern Symposium (Harvard CfA) 24. Harvard-Horizons 2020 Scholar 25. To eight graduate students selected across Harvard to receive professional development training, culminating in public "TED-style" talk 25. Certificate of Distinction in Teaching, Harvard University 25. Harvard Astronomy Departmental Teaching Award 26. Certificate of Distinction in Teaching, Harvard University 26. La Serena School for Data Science Full Scholarship 27. Spring 201 28. La Serena School for Data Science Full Scholarship 29. Supports outstanding graduate students in NSF-supported science disciplines 29. John P. and Carol J. Merrill Graduate Fellowship, Harvard University 29. Peirce Fellowship, Harvard Astronomy 20. Peirce Fellowship, Harvard Astronomy 20. Peirce Fellowship, Harvard Astronomy 20. Peirce Fellowship for top three admitted Harvard Astronomy applicants 20. Vyssotsky Prize, University of Virginia Astronomy 20. Awarded to one outstanding third year astrophysics major at the University of Virginia 20. Double Hoo Research Award, University of Virginia 20. Double Hoo Research Consortium Research Fellowship 20. Kate Cabell Claiborne Cox Scholarship, University of Virginia History 20. Harrison Undergraduate Research Award, University of Virginia History 20. Harrison Undergraduate Research Award, University of Virginia History 20. Summer 2013–Spring 201 20. Harrison Undergraduate Research Award, University of Virginia History		January 2018
18. Contributed Talk, Harvard Astrostats Day (Harvard CfA) 19. Contributed Talk, Galactic Star Formation with Survey (MPIA) 20. Contributed Talk, Dunlap Institute (Toronto, Canada) 21. Contributed Talk, New England Region SF Meeting 22. Contributed Talk, Filamentary Structure in Molecular Clouds (Charlottesville, VA) 23. Talk, SAO Astronomy Intern Symposium (Harvard CfA) 24. Talk, SAO Astronomy Intern Symposium (Harvard CfA) 25. CELECTED AWARDS 26. Harvard-Horizons 2020 Scholar 27. Top eight graduate students selected across Harvard to receive professional development training, culminating in public "TED-style" talk 28. Certificate of Distinction in Teaching, Harvard University 29. Harvard Astronomy Departmental Teaching Award 20. Certificate of Distinction in Teaching, Harvard University 20. La Serena School for Data Science Full Scholarship 20. NSF Graduate Research Fellowship Award 20. Supports outstanding graduate students in NSF-supported science disciplines 20. John P. and Carol J. Merrill Graduate Fellowship, Harvard University 20. Peirce Fellowship, Harvard Astronomy 20. Peirce Fellowship, University of Virginia Astronomy 20. Peirce Fellowship, University of Virginia 20. UVA Undergraduate Physics Research Symposium, 1st Place 20. Pall 201 20. Spring 201 20. Vyssotsky Prize, University of Virginia Astronomy 20. Awarded to one outstanding third year astrophysics major at the University of Virginia 20. Double Hoo Research Award, University of Virginia 20. Double Hoo Research Award, University of Virginia 20. Fall 201 20. Spring 201 20. Kate Cabell Claiborne Cox Scholarship, University of Virginia History 20. Summer 2013–Spring 201 20. Harrison Undergraduate Research Award,	, , , , , , , , , , , , , , , , , , , ,	October 2017
20. Contributed Talk, Dunlap Institute (Toronto, Canada) 21. Contributed Talk, New England Region SF Meeting 22. Contributed Talk, Filamentary Structure in Molecular Clouds (Charlottesville, VA) 23. Talk, SAO Astronomy Intern Symposium (Harvard CfA) 24. August 201 25. CELECTED AWARDS **Harvard-Horizons 2020 Scholar** Top eight graduate students selected across Harvard to receive professional development training, culminating in public "TED-style" talk **Certificate of Distinction in Teaching, Harvard University **Certificate of Distinction in Teaching, Harvard University **Certificate of Distinction in Teaching, Harvard University **Spring 201** **La Serena School for Data Science Full Scholarship **NSF Graduate Research Fellowship Award **NSF Graduate Research Fellowship Award **Supports outstanding graduate students in NSF-supported science disciplines** **John P. and Carol J. Merrill Graduate Fellowship, Harvard University **Pall 2015-Spring 201** **Peirce Fellowship, Harvard Astronomy Internal fellowship for top three admitted Harvard Astronomy applicants** **UVA Undergraduate Physics Research Symposium, 1st Place **Uvyssotsky Prize, University of Virginia Astronomy Awarded to one outstanding third year astrophysics major at the University of Virginia **Double Hoo Research Award, University of Virginia History **Name 201 **Name 201 **Name 201 **Name 201 **Spring 201 **Name 201 **Name 201 **Spring 201 **Name 201 **Name 201 **Spring 201 **Name 201 **Spring 201 **Name 201 **Name 201 **Spring 201 **Name 201 **Na		September 2017
21. Contributed Talk, New England Region SF Meeting 22. Contributed Talk, Filamentary Structure in Molecular Clouds (Charlottesville, VA) October 201 23. Talk, SAO Astronomy Intern Symposium (Harvard CfA) August 201 35. Talk, SAO Astronomy Intern Symposium (Harvard CfA) August 201 Augus	19. Contributed Talk, Galactic Star Formation with Survey (MPIA)	July 2017
21. Contributed Talk, New England Region SF Meeting 22. Contributed Talk, Filamentary Structure in Molecular Clouds (Charlottesville, VA) October 201 23. Talk, SAO Astronomy Intern Symposium (Harvard CfA) August 201 35. Talk, SAO Astronomy Intern Symposium (Harvard CfA) August 201 Augus	,	May 2018
ELECTED AWARDS Harvard-Horizons 2020 Scholar Top eight graduate students selected across Harvard to receive professional development training, culminating in public "TED-style" talk Certificate of Distinction in Teaching, Harvard University Harvard Astronomy Departmental Teaching Award Spring 201 Certificate of Distinction in Teaching, Harvard University Spring 201 La Serena School for Data Science Full Scholarship Summer 201 NSF Graduate Research Fellowship Award Supports outstanding graduate students in NSF-supported science disciplines John P. and Carol J. Merrill Graduate Fellowship, Harvard University Peirce Fellowship, Harvard Astronomy Internal fellowship for top three admitted Harvard Astronomy applicants UVA Undergraduate Physics Research Symposium, 1st Place Vyssotsky Prize, University of Virginia Astronomy Awarded to one outstanding third year astrophysics major at the University of Virginia Double Hoo Research Award, University of Virginia History Kate Cabell Claiborne Cox Scholarship, University of Virginia History Harrison Undergraduate Research Award, University of Virginia Summer 2013-Spring 201 Harrison Undergraduate Research Award, University of Virginia Summer 2013-Spring 201	· · · · · · · · · · · · · · · · · · ·	January 2010
Harvard-Horizons 2020 Scholar Top eight graduate students selected across Harvard to receive professional development training, culminating in public "TED-style" talk Certificate of Distinction in Teaching, Harvard University Harvard Astronomy Departmental Teaching Award Certificate of Distinction in Teaching, Harvard University Spring 201 La Serena School for Data Science Full Scholarship Summer 201 NSF Graduate Research Fellowship Award Supports outstanding graduate students in NSF-supported science disciplines John P. and Carol J. Merrill Graduate Fellowship, Harvard University Peirce Fellowship, Harvard Astronomy Internal fellowship for top three admitted Harvard Astronomy applicants UVA Undergraduate Physics Research Symposium, 1st Place Vyssotsky Prize, University of Virginia Astronomy Awarded to one outstanding third year astrophysics major at the University of Virginia Double Hoo Research Award, University of Virginia Nitermediate Honors, University of Virginia Kate Cabell Claiborne Cox Scholarship, University of Virginia History Harrison Undergraduate Research Award, University of Virginia Harrison Undergraduate Research Award, University of Virginia Summer 2013-Spring 201	22. Contributed Talk, Filamentary Structure in Molecular Clouds (Charlottesvil	lle, VA) October 201
Harvard-Horizons 2020 Scholar Top eight graduate students selected across Harvard to receive professional development training, culminating in public "TED-style" talk Certificate of Distinction in Teaching, Harvard University Spring 201 Harvard Astronomy Departmental Teaching Award Spring 201 Certificate of Distinction in Teaching, Harvard University Spring 201 La Serena School for Data Science Full Scholarship NSF Graduate Research Fellowship Award Supports outstanding graduate students in NSF-supported science disciplines John P. and Carol J. Merrill Graduate Fellowship, Harvard University Fall 2015-Spring 201 Peirce Fellowship, Harvard Astronomy Internal fellowship for top three admitted Harvard Astronomy applicants UVA Undergraduate Physics Research Symposium, 1st Place Vyssotsky Prize, University of Virginia Astronomy Awarded to one outstanding third year astrophysics major at the University of Virginia Double Hoo Research Award, University of Virginia Intermediate Honors, University of Virginia Kate Cabell Claiborne Cox Scholarship, University of Virginia History Harrison Undergraduate Research Award, University of Virginia History Harrison Undergraduate Research Award, University of Virginia Summer 2013-Spring 201 Summer 2013-Spring 201	23. Talk, SAO Astronomy Intern Symposium (Harvard CfA)	August 2014
Harvard-Horizons 2020 Scholar Top eight graduate students selected across Harvard to receive professional development training, culminating in public "TED-style" talk Certificate of Distinction in Teaching, Harvard University Spring 201 Harvard Astronomy Departmental Teaching Award Spring 201 Certificate of Distinction in Teaching, Harvard University Spring 201 La Serena School for Data Science Full Scholarship NSF Graduate Research Fellowship Award Supports outstanding graduate students in NSF-supported science disciplines John P. and Carol J. Merrill Graduate Fellowship, Harvard University Fall 2015-Spring 201 Peirce Fellowship, Harvard Astronomy Internal fellowship for top three admitted Harvard Astronomy applicants UVA Undergraduate Physics Research Symposium, 1st Place Vyssotsky Prize, University of Virginia Astronomy Awarded to one outstanding third year astrophysics major at the University of Virginia Double Hoo Research Award, University of Virginia Intermediate Honors, University of Virginia Kate Cabell Claiborne Cox Scholarship, University of Virginia History Harrison Undergraduate Research Award, University of Virginia History Harrison Undergraduate Research Award, University of Virginia Summer 2013-Spring 201 Summer 2013-Spring 201	NOT DOTTED AWARDS	
Top eight graduate students selected across Harvard to receive professional development training, culminating in public "TED-style" talk Certificate of Distinction in Teaching, Harvard University Harvard Astronomy Departmental Teaching Award Certificate of Distinction in Teaching, Harvard University Spring 201 Certificate of Distinction in Teaching, Harvard University Spring 201 La Serena School for Data Science Full Scholarship Summer 201 NSF Graduate Research Fellowship Award Supports outstanding graduate students in NSF-supported science disciplines John P. and Carol J. Merrill Graduate Fellowship, Harvard University Peirce Fellowship, Harvard Astronomy Internal fellowship for top three admitted Harvard Astronomy applicants UVA Undergraduate Physics Research Symposium, 1st Place Vyssotsky Prize, University of Virginia Astronomy Awarded to one outstanding third year astrophysics major at the University of Virginia Double Hoo Research Award, University of Virginia Spring 201 Intermediate Honors, University of Virginia Kate Cabell Claiborne Cox Scholarship, University of Virginia History Harrison Undergraduate Research Award, University of Virginia Summer 2013–Spring 201 Harrison Undergraduate Research Award, University of Virginia Summer 2013–Spring 201		
 Certificate of Distinction in Teaching, Harvard University Spring 201 Harvard Astronomy Departmental Teaching Award Certificate of Distinction in Teaching, Harvard University Spring 201 Certificate of Distinction in Teaching, Harvard University Spring 201 La Serena School for Data Science Full Scholarship NSF Graduate Research Fellowship Award Supports outstanding graduate students in NSF-supported science disciplines John P. and Carol J. Merrill Graduate Fellowship, Harvard University Fall 2015-Spring 201 Peirce Fellowship, Harvard Astronomy Fall 2015-Fall 201 Internal fellowship for top three admitted Harvard Astronomy applicants UVA Undergraduate Physics Research Symposium, 1st Place Vyssotsky Prize, University of Virginia Astronomy Awarded to one outstanding third year astrophysics major at the University of Virginia Double Hoo Research Award, University of Virginia Spring 201 Intermediate Honors, University of Virginia Virginia Space Grant Consortium Research Fellowship Kate Cabell Claiborne Cox Scholarship, University of Virginia History Summer 2013-Spring 201 Harrison Undergraduate Research Award, University of Virginia Summer 2013-Spring 201 		Spring 202
 Harvard Astronomy Departmental Teaching Award Certificate of Distinction in Teaching, Harvard University La Serena School for Data Science Full Scholarship NSF Graduate Research Fellowship Award Supports outstanding graduate students in NSF-supported science disciplines John P. and Carol J. Merrill Graduate Fellowship, Harvard University Peirce Fellowship, Harvard Astronomy Fall 2015-Spring 201 Peirce Fellowship for top three admitted Harvard Astronomy applicants UVA Undergraduate Physics Research Symposium, 1st Place Vyssotsky Prize, University of Virginia Astronomy Awarded to one outstanding third year astrophysics major at the University of Virginia Double Hoo Research Award, University of Virginia Spring 201 Intermediate Honors, University of Virginia Virginia Space Grant Consortium Research Fellowship Kate Cabell Claiborne Cox Scholarship, University of Virginia History Spring 201 Harrison Undergraduate Research Award, University of Virginia Summer 2013-Spring 201 		
 Harvard Astronomy Departmental Teaching Award Certificate of Distinction in Teaching, Harvard University La Serena School for Data Science Full Scholarship NSF Graduate Research Fellowship Award Supports outstanding graduate students in NSF-supported science disciplines John P. and Carol J. Merrill Graduate Fellowship, Harvard University Peirce Fellowship, Harvard Astronomy Internal fellowship for top three admitted Harvard Astronomy applicants UVA Undergraduate Physics Research Symposium, 1st Place Vyssotsky Prize, University of Virginia Astronomy Awarded to one outstanding third year astrophysics major at the University of Virginia Double Hoo Research Award, University of Virginia Spring 201 Intermediate Honors, University of Virginia Virginia Space Grant Consortium Research Fellowship Kate Cabell Claiborne Cox Scholarship, University of Virginia History Spring 201 Harrison Undergraduate Research Award, University of Virginia Summer 2013-Spring 201 	• Certificate of Distinction in Teaching, Harvard University	Spring 201
 Certificate of Distinction in Teaching, Harvard University La Serena School for Data Science Full Scholarship NSF Graduate Research Fellowship Award Supports outstanding graduate students in NSF-supported science disciplines John P. and Carol J. Merrill Graduate Fellowship, Harvard University Peirce Fellowship, Harvard Astronomy Internal fellowship for top three admitted Harvard Astronomy applicants UVA Undergraduate Physics Research Symposium, 1st Place Vyssotsky Prize, University of Virginia Astronomy Awarded to one outstanding third year astrophysics major at the University of Virginia Double Hoo Research Award, University of Virginia Intermediate Honors, University of Virginia Virginia Space Grant Consortium Research Fellowship Kate Cabell Claiborne Cox Scholarship, University of Virginia History Spring 201 Harrison Undergraduate Research Award, University of Virginia Summer 2013-Spring 201 	Harvard Astronomy Departmental Teaching Award	Spring 201
 NSF Graduate Research Fellowship Award Supports outstanding graduate students in NSF-supported science disciplines John P. and Carol J. Merrill Graduate Fellowship, Harvard University Peirce Fellowship, Harvard Astronomy Internal fellowship for top three admitted Harvard Astronomy applicants UVA Undergraduate Physics Research Symposium, 1st Place Vyssotsky Prize, University of Virginia Astronomy Awarded to one outstanding third year astrophysics major at the University of Virginia Double Hoo Research Award, University of Virginia Intermediate Honors, University of Virginia Virginia Space Grant Consortium Research Fellowship Kate Cabell Claiborne Cox Scholarship, University of Virginia History Harrison Undergraduate Research Award, University of Virginia Summer 2013-Spring 201 Harrison Undergraduate Research Award, University of Virginia 	• Certificate of Distinction in Teaching, Harvard University	Spring 201
Supports outstanding graduate students in NSF-supported science disciplines • John P. and Carol J. Merrill Graduate Fellowship, Harvard University • Peirce Fellowship, Harvard Astronomy Internal fellowship for top three admitted Harvard Astronomy applicants • UVA Undergraduate Physics Research Symposium, 1st Place • Vyssotsky Prize, University of Virginia Astronomy Awarded to one outstanding third year astrophysics major at the University of Virginia • Double Hoo Research Award, University of Virginia • Double Hoors, University of Virginia • Virginia Space Grant Consortium Research Fellowship • Kate Cabell Claiborne Cox Scholarship, University of Virginia History • Harrison Undergraduate Research Award, University of Virginia Summer 2013–Spring 201	• La Serena School for Data Science Full Scholarship	Summer 201
 John P. and Carol J. Merrill Graduate Fellowship, Harvard University Peirce Fellowship, Harvard Astronomy	• NSF Graduate Research Fellowship Award	Fall 2016-Spring 202
 Peirce Fellowship, Harvard Astronomy Internal fellowship for top three admitted Harvard Astronomy applicants UVA Undergraduate Physics Research Symposium, 1st Place Vyssotsky Prize, University of Virginia Astronomy Awarded to one outstanding third year astrophysics major at the University of Virginia Double Hoo Research Award, University of Virginia Intermediate Honors, University of Virginia Virginia Space Grant Consortium Research Fellowship Kate Cabell Claiborne Cox Scholarship, University of Virginia History Harrison Undergraduate Research Award, University of Virginia Summer 2013-Spring 201 Harrison Undergraduate Research Award, University of Virginia 	Supports outstanding graduate students in NSF-supported science disciplines	
 Internal fellowship for top three admitted Harvard Astronomy applicants UVA Undergraduate Physics Research Symposium, 1st Place Vyssotsky Prize, University of Virginia Astronomy	• John P. and Carol J. Merrill Graduate Fellowship, Harvard University	Fall 2015-Spring 201
 Vyssotsky Prize, University of Virginia Astronomy Awarded to one outstanding third year astrophysics major at the University of Virginia Double Hoo Research Award, University of Virginia Intermediate Honors, University of Virginia Virginia Space Grant Consortium Research Fellowship Kate Cabell Claiborne Cox Scholarship, University of Virginia History Harrison Undergraduate Research Award, University of Virginia Summer 2013–Spring 201 Summer 2013–Spring 201 	- 7	Fall 2015-Fall 201
Awarded to one outstanding third year astrophysics major at the University of Virginia Double Hoo Research Award, University of Virginia Intermediate Honors, University of Virginia Virginia Space Grant Consortium Research Fellowship Kate Cabell Claiborne Cox Scholarship, University of Virginia History Harrison Undergraduate Research Award, University of Virginia Summer 2013–Spring 201	• UVA Undergraduate Physics Research Symposium, 1st Place	Fall 201
 Double Hoo Research Award, University of Virginia Intermediate Honors, University of Virginia Virginia Space Grant Consortium Research Fellowship Kate Cabell Claiborne Cox Scholarship, University of Virginia History Harrison Undergraduate Research Award, University of Virginia Summer 2013–Spring 201 Summer 2013–Spring 201 	• Vyssotsky Prize, University of Virginia Astronomy	Spring 201
 Intermediate Honors, University of Virginia Virginia Space Grant Consortium Research Fellowship Kate Cabell Claiborne Cox Scholarship, University of Virginia History Harrison Undergraduate Research Award, University of Virginia Summer 2013–Spring 201 Summer 2013–Spring 201 	Awarded to one outstanding third year astrophysics major at the University of	Virginia
 Virginia Space Grant Consortium Research Fellowship Kate Cabell Claiborne Cox Scholarship, University of Virginia History Harrison Undergraduate Research Award, University of Virginia Summer 2013–Spring 201 Summer 2013–Spring 201 	• Double Hoo Research Award, University of Virginia	Spring 201
 Kate Cabell Claiborne Cox Scholarship, University of Virginia History Harrison Undergraduate Research Award, University of Virginia Summer 2013–Spring 201 	• Intermediate Honors, University of Virginia	Fall 201
• Harrison Undergraduate Research Award, University of Virginia Summer 2013–Spring 201	• Virginia Space Grant Consortium Research Fellowship	Summer 2013–Spring 201
	• Kate Cabell Claiborne Cox Scholarship, University of Virginia History	Spring 201
• Echols Scholarship Fund Grant, University of Virginia Summer 201	• Harrison Undergraduate Research Award, University of Virginia	Summer 2013–Spring 201
	• Echols Scholarship Fund Grant, University of Virginia	Summer 201

- Small Research and Travel Grant, University of Virginia
 - Virginia Spring 2012
- $\bullet\,$ Wolfe Undergraduate Docent Award, University of Virginia

Fall 2011-Fall 2015

Summer 2012

• Echols Scholar, University of Virginia

TEACHING & MENTORING

Teaching

I have served as a teaching fellow for both an undergraduate and graduate course. Both times, I received the Bok Center Certificate of Distinction in Teaching, based on high evaluations in student course feedback. I also received the Harvard Astronomy departmental award for teaching excellence in Spring 2018.

• Physics & Chemistry of the ISM (AY203). Harvard University.

Spring 2019

• Galactic and Extragalactic Astronomy (AY17). Harvard University.

Fall 2017

Mentoring

• Kaustav Das (IIT Kanpur). Undergraduate Research. Summer 2019 - Present Constraining the Distance to the North Polar Spur with Gaia DR2

• Laura Chapman (Harvard University). Undergraduate Research.

A statistics plugin for the glue visualization environment

Summer 2018

Fall 2015 - Present

PROFESSIONAL ACTIVITIES

• Harvard Data Science Review, Student Editorial Board 2019	Spring 2020 - Present
• Scientific Organizing Committee, Harvard-Heidelberg Star Formation Meeting 2019	Fall 2019
• Referee for $A \mathcal{E}A$, AJ , and $MNRAS$	Fall 2018 - Present
• Core member, glue visualization software team	Spring 2017 - Present
• CfA Star Formation Journal Club Series Co-Organizer	Spring 2018 - Present

PRESS

For full overview of *Radcliffe Wave* press coverage, see our website. Total of 324 news stories, with selected highlights below.

inginging below.	
• Appeared live on NPR's Science Friday (with A. Goodman) discussing	the Radcliffe Wave January 2020
$ullet$ Harvard Gazette Interview on the discovery of the $\it Radcliffe~Wave$	January 2020
• Interview with The Associated Press on the Radcliffe Wave	January 2020

• Interview with Sky & Telescope on the Radcliffe Wave

• American Astronomical Society, Junior Member

- Appeared on Dr. Becky podcast (with A. Goodman & J. Alves) on the Radcliffe Wave January 2020
- Interview with Science News on the Milky Way Skeleton December 2015
- Interview with Space.com on the Milky Way Skeleton

 January 2015

OUTREACH

• Public Talk, Gloucester Area Astronomy Club	Summer 2019
• Astronomy Rewind, Volunteer Lead	Fall 2018
• Public Talk, New Hampshire Astronomical Society	Spring 2018
• Cambridge Explores the Universe Volunteer, Harvard University	Spring 2016, 2017, 2018, 2019
• Development of the MilkyWay3D.com Galactic Plane Mapper Tool	Fall 2016
• Harvard College Undergraduate Research Association Conference Invited Sp	peaker Fall 2016
• Dark Skies, Bright Kids Planetarium Lead, University of Virginia	March 2012–May 2015
• Harrison Institute for American History Docent, University of Virginia	September 2011–May 2015

OBSERVING EXPERIENCE

Cerro Tololo Observatory, Chile (Blanco 4m) (2 half-nights)	July 2019
Cerro Tololo Observatory, Chile (Blanco 4m) (2 nights)	May 2019
Cerro Tololo Observatory, Chile (Blanco 4m) (2 half-nights)	January 2019
Cerro Tololo Observatory, Chile (Blanco 4m) (4 half-nights)	August 2018
Cerro Tololo Observatory, Chile (Blanco 4m) (3 nights)	February 2018
MMT Observatory; Tucson, AZ (4 nights)	August 2014
Kitt Peak Observatory (Bok 90"); Tucson, AZ (5 nights)	December 2012