

CURRICULUM VITÆ
NORA SHIPP

CONTACT INFORMATION

37-582f
70 Vassar St.
Cambridge, MA 02139

Mobile: (301) 602-0437
E-mail: nshipp@mit.edu
Website: norashipp.github.io

EDUCATION & EXPERIENCE

MIT Kavli Institute for Astrophysics
and Space Research, Cambridge, MA
Postdoctoral Scholar

September 2021 - present

University of Chicago, Chicago, IL

Ph.D., Astronomy & Astrophysics

August 2021

Schramm Graduate Fellow, Harper Dissertation Fellow

- Thesis: *Discovery & Modeling of Milky Way Stellar Streams*
- Advisor: Alex Drlica-Wagner

LSSTC Data Science Fellow

2016-2018

NASA Goddard Space Flight Center, Greenbelt, MD

Postbaccalaureate Researcher

2014-2015

- Project: *Exploring Evidence for Cosmic Ray Acceleration in Westerlund 1*
- Advisor: Terri J. Brandt

Brown University, Providence, RI

Sc.B., with honors in Astrophysics

May 2014

- Thesis: *Fermi Unidentified Sources: Dark Matter or Astrophysics*
- Advisor: Savvas M. Koushiappas

HONORS & AWARDS

- MIT Infinite Expansion Award *2021*
- Schramm Graduate Student Fellowship *2020 - 2021*
- William Rainey Harper Dissertation Fellowship *2020 - 2021*
- Yoichiro Nambu Fellowship *2019*
- University Research Association Visiting Scholars Program *2018 - 2020*
- Department of Energy SCGSR Fellowship *2018 - 2019*
- Illinois Space Grant Consortium Graduate Fellowship *2018 - 2019*
- McCormick Fellowship *2015 - 2017*
- NASA Rhode Island Space Grant Scholarship *2012 - 2013*
- Brown University Undergraduate Teaching and Research Award *2012 - 2013*

PRESENTATIONS

Seminars

- Texas A&M Mitchell Institute Seminar *September 2022*
- Carnegie Mellon Astro Lunch *September 2022*
- CITA Seminar *August 2022*
- Cambridge Milky Way Group *September 2021*
- Michigan Galaxy Group *February 2021*
- Carnegie Lunch Talk *January 2021*
- CCAPP Seminar *November 2020*
- Yale Galaxy Lunch *September 2020*
- KIPAC Tea Talk *September 2020*
- STScI Galaxies Journal Club *September 2020*
- Fermilab Astrophysics Seminar *February 2018*

Invited Conference Talks

- DES Collaboration Meeting Plenary Talk *May 2021*
- LSST Dark Matter Workshop *August 2019*
- Fermilab New Perspectives *June 2019*
- DECam Community Science Workshop *May 2018*

Contributed Conference Talks

- Towards Real-Time Galactic Dynamics *July 2022*
- Satellites and Streams in the Framework of Cosmological Models at EAS *June 2022*
- 53rd Meeting of the AAS Division on Dynamical Astronomy
- Streams 21: Constraints on Dark Matter *February 2021*
- 237th Meeting of the American Astronomical Society *January 2021*
- STScI Symposium, The Local Group: Assembly and Evolution *August 2020*
- Small Galaxies, Cosmic Questions *July 2019*
- KICP Near-field Cosmology Workshop *June 2018*
- American Physical Society April Meeting *April 2018*
- 231st Meeting of the American Astronomical Society *January 2018*

Poster Presentations

- Stasis and Disequilibrium in the Milky Way *April 2019*
- 233rd Meeting of the American Astronomical Society *January 2019*
- 225th Meeting of the American Astronomical Society *January 2015*

- PUBLIC PRESS
- [Rivers in the Sky](#), Symmetry Magazine
 - [Dark Energy Survey finds remains of 11 galaxies eaten by the Milky Way](#), UChicago News
 - [Dark Energy Survey Reveals That The Milky Way Has Devoured 11 Other Galaxies](#), IFL Science

- OUTREACH,
EQUITY &
INCLUSION
- Co-founder of [IDEA](#) (Inclusion, Diversity, and Equity in Astronomy) *2017 - present*
 - Co-chair of Astrobites Diversity Committee *2019 - 2020*
 - Research Coordinator for Astrobites in the Classroom Study *2017 - 2018*
 - [Writer for Astrobites](#) *2016 - 2018*
 - Astronomy Conversations Presenter at Adler Planetarium *2015 - 2017*
 - Founding Member of Astronomy on Tap Chicago *2015 - 2017*

PROFESSIONAL SERVICE & LEADERSHIP

Department Committees, University of Chicago

- Graduate Admissions Committee *2020 - 2021*
- Diversity Committee *2017 - 2020*
- Undergraduate Education Committee *2016 - 2017*

Workshops and Seminars Organized

- MIT Milky Way Journal Club *2021 - present*
- UChicago Milky Way Discussion Group *2019 - 2021*
- [IDEA](#) (Inclusion, Diversity, and Equity in Astronomy) Week *August 2020*
- KICP LSST Dark Matter Workshop *August 2019*
- [IDEA](#) (Inclusion, Diversity, and Equity in Astronomy) Day *May 2019*

Reviewer for Astrophysical Journal, Nature Astronomy, MNRAS

2019 - present

Observing

- Dark Energy Survey (DES) (7 nights)
- DECam Local Volume Exploration (DELVE) Survey (3 nights)

Collaboration Membership

- Dark Energy Survey (DES)
- DECam Local Volume Exploration Survey (DELVE)
- Southern Stellar Stream Spectroscopic Survey (S⁵)
- LSST Dark Energy Science Collaboration (DESC)
- Feedback in Realistic Environments (FIRE)

TEACHING

Lead Instructor

University of Chicago

- [Space Explorers KICP Summer Institute](#)

Summer 2018

Guest Lecturer

University of Chicago

- ASTR13300: Introduction to Astrophysics
- ASTR11901: Physics of Stars

Spring 2020

Summer 2018

Teaching Assistant

University of Chicago

- ASTR018200: The Origin and Evolution of the Universe
- PHSC12620: The Big Bang
- PHSC12610: Black Holes
- PHSC12600: Matter, Energy, Space, and Time

Winter 2018

Spring 2016

Winter 2016

Fall 2015

Brown University

- PHYS0270: Introduction to Astronomy
- PHYS0220: Astronomy

Spring 2012, 2014

Fall 2012, 2013, 2014

PUBLICATIONS

First-Author

- [1] **Shipp, N.**, Panithanpaisal, N., Necib, L., et al. "*Streams on FIRE: Populations of Detectable Stellar Streams in the Milky Way and FIRE*", 2022, submitted to ApJ, [arXiv:2208.02255](#)
- [2] **Shipp, N.**, Erkal, D., Drlica-Wagner, A., et al. "*Measuring the Mass of the LMC with Stellar Streams Observed by S5*", 2021, ApJ, 923, 149, [arXiv:2107.13004](#)
- [3] **Shipp, N.**, Price-Whelan, A., Tavangar, K., et al. "*Discovery of Extended Tidal Tails Around the Globular Cluster Palomar 13*" 2020, AJ, 160, 244, [arXiv:2006.12501](#)
- [4] **Shipp, N.**, Li, T. S., Pace, A. B., et al. "*Proper Motions of Stellar Streams Discovered in the Dark Energy Survey*" 2019, ApJ, 885, 3, [arXiv:1907.09488](#)
- [5] **Shipp, N.**, Drlica-Wagner, A., Balbinot, E., et al. "*Stellar Streams Discovered in the Dark Energy Survey*" 2018, ApJ, 862, 114, [arXiv:1801.03097](#)

Significant Contribution

- [6] Li, T. S., Ji, A. P., Pace, A. B., Erkal, D., Koposov, S. E., **Shipp, N.**, et al. "*S⁵: The Orbital and Chemical Properties of One Dozen Stellar Streams*" 2022, ApJ, 928, 30, [arXiv:2110.06950](#)
- [7] Tavangar, K., Ferguson, P. S., **Shipp, N.**, et al. "*From the Fire: A Deeper Look at the Phoenix Stream*" 2022, ApJ, 925, 118 [arXiv:2110.03703](#)
- [8] Ferguson, P. S., **Shipp, N.**, Drlica-Wagner, A., et al. "*DELVE-ing into the Jet: a thin stellar stream on a retrograde orbit at 30 kpc*" 2022, 163, 18, [arXiv:2104.11755](#)

- [9] Li, T. S., Koposov, S., Erkal, D., Ji, A. P. **Shipp, N.**, et al. "*Broken into Pieces: ATLAS and Aliqa Uma as One Single Stream*" 2021, ApJ, 911, 194, [arXiv:2006.10763](#)
 - [10] Li, T. S., Koposov, S., Zucker, D., Lewis, G. F., Kuehn, K., Simpson, J. D., Ji, A. P., **Shipp, N.**, et al. "*The Southern Stellar Stream Spectroscopic Survey (S5): Overview, Target Selection, Data Reduction, Validation, and Early Science*" 2019, MNRAS 490, 3508, [arXiv:1907.09481](#)
 - [11] Drlica-Wagner, A., Mao, Yao-Yuan, [...], **Shipp, N.**, et al. "*Probing the Fundamental Nature of Dark Matter with the Large Synoptic Survey Telescope*" 2019, [arXiv:1902.01055](#)
- Co-Author*
- [12] Lilleengen, S., Petersen, M. S., Erkal, D., [...], **Shipp, N.**, et al. "*The effect of the deforming dark matter haloes of the Milky Way and the Large Magellanic Cloud on the Orphan-Chenab stream*" 2022, submitted to MNRAS, [arXiv:2205.01688](#)
 - [13] Bechtol, K., Birrer, S., Cyr-Racine, F., [...], **Shipp, N.**, et al. "*Snowmass2021 Cosmic Frontier White Paper: Dark Matter Physics from Halo Measurements*" 2022, [arXiv:2203.07354](#)
 - [14] Ji, A. P., Koposov, S. E., Li, T. S., [...], **Shipp, N.**, et al. "*Kinematics of Antlia 2 and Crater 2 from The Southern Stellar Stream Spectroscopic Survey (S5)*" 2021, [arXiv:2106.12656](#)
 - [15] Drlica-Wagner, A., Carlin, J. L., Nidever, D. L., [...], **Shipp, N.**, et al. "*The DECam Local Volume Exploration Survey: Overview and First Data Release*" 2021, ApJS, 256, 2 [arXiv:2103.07476](#) [2103.07476](#)
 - [16] Hansen, T. T., Ji, A. P., Da Costa, G. S., [...], **Shipp, N.**, et al. "*S5: The Destruction of a Bright Dwarf Galaxy as Revealed by the Chemistry of the Indus Stellar Stream*" 2021, ApJ, 915, 103, [arXiv:2104.13883](#)
 - [17] Ji, A. P., Li, T. S., Hansen, T. T., [...], **Shipp, N.**, et al. "*The Southern Stellar Stream Spectroscopic Survey (S5): Chemical Abundances of Seven Stellar Streams*" 2020, ApJ, 60, 181, [arXiv:2008.07568](#)
 - [18] Wan, Z., Lewis, G., Li, T. S., [...], **Shipp, N.**, et al. "*The tidal remnant of an unusually metal-poor globular cluster*" 2020, Nature, 583, 768, [arXiv:2007.14577](#)
 - [19] Koposov, S., Boubert, D., Li, T. S., [...], **Shipp, N.**, et al. "*The Great Escape: Discovery of a nearby 1700 km/s star ejected from the Milky Way by Sgr A**" 2020, MNRAS 491, 2465, [arXiv:1907.11725](#)
 - [20] Bechtol, K., Drlica-Wagner, A., [...], **Shipp, N.**, et al. "*Dark Matter Science in the Era of LSST*" 2019, [arXiv:1903.04425](#)
 - [21] Erkal, D., Li, T. S., Koposov, S. E., [...], **Shipp, N.**, et al. "*Modeling the Tucana III stream - a close passage with the LMC*" 2018, MNRAS, 481, 3148, [arXiv:1804.07762](#)
 - [22] Li, T. S., Simon, J. D., Kuehn, K., [...], **Shipp, N.**, et al. "*The First Tidally Disrupted Ultra-Faint Dwarf Galaxy? - Spectroscopic Analysis of the Tucana III Stream*" 2018, ApJ, 866, 22, [arXiv:1804.07761](#)
 - [23] Abbott, T. M. C., Abdalla, F. B., Allam, S., [...], **Shipp, N.**, et al. "*The Dark Energy Survey Data Release 1*" 2018, ApJS, 239, 18, [arXiv:1801.03181](#)
 - [24] Avva, J., Bechtol, K., Chesebro, T., [...], **Shipp, N.**, et al. "*Development toward a ground-based interferometric phased array for radio detection of high energy neutrinos*" 2017, Nucl. Inst. Meth. A, 869, 46, [arXiv:1605.03525](#)

Other

- [25] Thais, S., Leibowitz, S., Rios Gutierrez, A., Passarelli, A., Santo, S., **Shipp, N.**, "*Identifying At-Risk Communities and Key Vulnerability Indicators in the COVID-19 Pandemic*", 2021, [medRxiv:2021.09.19.21263805](#)
- [26] Khullar, G., Kohler, S., Konchady, T., [...], **Shipp, N.**, et al. "*Astrobites as a Community-led Model for Education, Science Communication, and Accessibility in Astrophysics*" 2019, Bulletin of the American Astronomical Society, 51, 230, [arXiv:1907.09496](#)