

LAURA A. LOPEZ

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Positions Held

Associate Professor, Department of Astronomy, The Ohio State University	2021–Present
Assistant Professor, Department of Astronomy, The Ohio State University	2015–2021
NASA Hubble Postdoctoral Fellow, Harvard-Smithsonian Center for Astrophysics	2014–2015
Pappalardo Fellow in Physics & NASA Einstein Postdoctoral Fellow, MIT	2011–2014

Education

University of California, Santa Cruz	Astronomy & Astrophysics	Ph.D., 2011
University of California, Santa Cruz	Astronomy & Astrophysics	M.S., 2007
Massachusetts Institute of Technology	Physics	S.B., 2004

Awards

Vera Rubin Distinguished Visiting Professor, UC Santa Cruz	2022–2023
IDEA Scholar, Flatiron Institute	2022
AAS High-Energy Astrophysics Division Early Career Prize	2022
OSU ASC Early-Career Faculty Excellence Award	2021
Cottrell Scholar Award, Research Corp for Science Advancement	2019–2022
NASA Group Achievement Award (for <i>Lynx</i> Science & Technology Definition Team)	2019
Tycho & Sophie Brahe Visiting Professorship, Niels Bohr Institute	2018–2021
Scialog Fellow, Research Corporation for Science Advancement	2018, 2015
American Astronomical Society Annie Jump Cannon Award	2016
American Physical Society Outstanding Doctoral Thesis in Astrophysics Award	2012
UC President’s Dissertation Year Fellowship	2010–2011
AAUW American Dissertation Fellowship	2010–2011
ARCS (Achievement Rewards for College Scientists) Foundation Fellowship	2010–2011
UC Eugene Cota-Robles Fellowship	2005–2006; 2009–2010
NSF Graduate Research Fellowship	2004–2009
AAS Beth Brown Memorial Prize (for best poster at NSBP/NSHP meeting)	2009
Whitford Prize (for outstanding second year student), <i>UCSC Astronomy Dept</i>	2007
Alan H. Barrett Prize (for best astrophysics thesis), <i>MIT Physics Dept</i>	2004
Joel Matthew Orloff Award (for outstanding service in physics), <i>MIT Physics Dept</i>	2004
American Physical Society Corporate Minority Scholarship	2001; 2002

Select Successful Grants as PI

Total of grants obtained as PI: \$1,956,057. Including postdoctoral awards: \$2,604,390.

Heising-Simons Foundation Grant, BlackinAstro initiatives (\$100,000)	2022
Heising-Simons Foundation Grant, OSU Astronomy Bridge Program (\$344,079)	2022
Simons Foundation Sabbatical Visiting Researcher Grant (\$52,189)	2022
NASA Astrophysics Data Analysis Program Grant (\$338,276)	2022
OSU College of Arts & Sciences, Graduate Student Success Grant (\$2,500)	2021
Cottrell Scholar Award, Research Corp for Science Advancement (\$100,000)	2019
<i>Chandra</i> X-ray Telescope, AO–20, archival proposal (\$52,999)	2019
<i>Chandra</i> X-ray Telescope, AO–20, 100 ks (\$68,000)	2019

<i>Chandra</i> X-ray Observatory, AO-18, 268 ks (\$107,036)	2017
<i>Chandra</i> X-ray Observatory, AO-18, 100 ks (\$68,000)	2017
<i>NuSTAR</i> X-ray Telescope, GO-2, 100 ks (\$42,361)	2016
<i>XMM-Newton</i> X-ray Observatory, AO16, 100 ks (\$50,964)	2016
<i>XMM-Newton</i> X-ray Observatory, AO15, 100 ks (\$52,561)	2016
NSF Astronomy & Astrophysics Grant (\$299,541)	2015
<i>NuSTAR</i> X-ray Telescope, GO-1, 200 ks (\$40,585)	2015
<i>Chandra</i> X-ray Telescope, AO-13, 220 ks (\$68,142)	2011
<i>Chandra</i> X-ray Telescope, AO-13, 105 ks (\$60,822)	2011
<i>Chandra</i> X-ray Telescope, AO-12, archival proposal (\$54,000)	2010
<i>Chandra</i> X-ray Telescope, AO-11, archival proposal (\$54,000)	2009

Presentations/Colloquia/Seminars

Given 125 Invited Talks and 36 Contributed Talks to date, including 80 talks since 2015.

Publication Summary

64 refereed publications + 6 white papers. 16 first-author + 20 publications led by advisees.

Teaching Experience

Astronomy 2292: Stellar, Galactic, & Extragalactic Astrophysics, OSU	Spring 2021, Spring 2022
Astronomy 7810: Order of Magnitude Astrophysics, OSU	Spring 2020
Astronomy 2895: Introduction to Astrophysics, OSU	Fall 2019
Astronomy 1141: Life in the Universe, OSU	Spring 2017, Spring 2018, Fall 2018, Fall 2019
Astronomy 1142: Black Holes, OSU	Spring 2016, Fall 2016, Fall 2017, Spring 2019, Fall 2020
Introduction to Galaxies, Hartnell Community College	Summer 2007

Select Service Experience

OSU Astronomy: Faculty Search Committee Diversity Officer	2022–Present
OSU Astronomy: Bridge Program Admissions Committee	2017–Present
OSU Astronomy: Graduate Admissions (chair 2022)	2015–2017, 2019–2022
OSU Astronomy: Diversity Committee (chair 2016–2021)	2015–2021
OSU Astronomy: Coffee Discussion Organizer	2018–2021
OSU: Faculty Sponsor, Polaris and URSA Programs	2019–Present
OSU: Faculty Sponsor, BlackinAstro	2021–Present
OSU: College of Arts & Sciences Faculty Research & Creative Expression Committee	2021–2023
OSU: Center for Cosmology & Astroparticle Physics Science Board	2019–2021
National: Lead, AXIS AGN and Stellar Feedback Science Working Group	2022–Present
National: Chair, AAS Committee on the Status of Minorities in Astronomy	2021–25
National: AAS Annie Jump Cannon Prize Selection Committee	2018–2020
National: NASA <i>Lynx</i> Science & Technology Definition Team	2016–2019
National: AAS High-Energy Astrophysics Division Executive Committee	2016–2019
National: AAS Committee on the Status of Minorities in Astronomy	2009–2015

Advising Experience

Advised 10 PhD students (Anna Rosen, Tyler Holland-Ashford, Grace Olivier, Romy Rodríguez Martínez, Ness Mayker Chen, Sebastian Lopez, Jennifer Rodriguez, Paarmita Pandey, Debosmita Pathak, Héctor Martínez-Rodríguez), 2 postdoctoral fellows (Samantha Benincasa, Katie Auchettl), 16 undergrads on research. 21 gender minorities, 13 Black/Latinx/Indigenous students.

Refereed Journal Publications

Summary: 64 refereed publications + 6 white papers. 16 first-author publications + 20 led by advisees.

64. Barnes, A. T., Watkins, E. J., Meidt, S. E., and 51 other authors including **Lopez, L. A.**, “*PHANGS-JWST First Results: Multi-wavelength View of Feedback-Driven Bubbles (The Phantom Voids) Across NGC 628*”, 2023, submitted to ApJ, arXiv:2212.00812
63. Watkins, E. J., Barnes, A. T., Henny, K. F. and 49 other authors including **Lopez, L. A.**, “*PHANGS-JWST First Results: A Statistical View on Bubble Evolution in NGC 628*”, 2023, submitted to ApJ, arXiv:2212.00811
62. Lee, J. C., Sandstrom, K. M., Leroy, A. K., and 74 other authors including **Lopez, L. A.**, “*PHANGS-JWST Treasury Survey: Star Formation, Feedback, and Dust Physics at High Angular Resolution in Nearby Galaxies*”, 2023, submitted to ApJ, arXiv:2212.02667
61. Liu, D., Schinnerer, E., Cao, Y., and 36 other authors including **Lopez, L. A.**, “*PHANGS-JWST First Results: Stellar Feedback-Driven Excitation and Dissociation of Molecular Gas in the Starburst Ring of NGC 1365?*”, 2023, submitted to ApJ, arXiv:2212.09652
60. Olivier, G. M.[†], **Lopez, L. A.**, Auchettl, K., Rosen, A. L., Batto, A., Neugent, K. F., Ramirez-Ruiz, E., Jayasinghe, T., Valley, P. J., Rowan, D. M., “*A Multiwavelength Study of the Massive Colliding Wind Binary WR20a: A Possible Progenitor for Fast-Spinning LIGO Binary Black Hole Mergers*”, 2023, submitted to ApJ, arXiv:2212.02514
59. Holland-Ashford, T.[†], Slane, P., **Lopez, L. A.**, Auchettl, K. “*Estimating Ejecta Mass Ratios in Kepler’s SNR Through Spectral Modeling of its Complex Global X-ray Emission*”, 2023, submitted to ApJ
58. Leroy, A. K., Sandstrom, K., Rosolowsky, E., and 48 other authors including **Lopez, L. A.**, “*PHANGS-JWST First Results: Mid-Infrared Emission Traces Both Gas Column Density and Heating at 100 pc Scales*”, 2023, submitted to ApJ, arXiv:2212.10574
57. Sandstrom, K., Chastanet, J., Sutter, J., and 28 other authors including **Lopez, L. A.**, “*PHANGS-JWST First Results: Mapping the 3.3 μ m Polycyclic Aromatic Hydrocarbon Vibrational Band in Nearby Galaxies with NIRCAM Medium Bands*”, 2023, submitted to ApJ, arXiv:2301.00854
56. Sandstrom, K., Koch, E. W., Leroy, A. K., and 43 other authors including **Lopez, L. A.**, “*PHANGS-JWST First Results: Tracing the Diffuse ISM with JWST Imaging of Polycyclic Aromatic Hydrocarbon Emission in Nearby Galaxies*”, 2023, submitted to ApJ, arXiv:2212.11177
55. Mayker Chen, N.[†], Tucker, M. A., Hoyer, N., and 25 other authors including **Lopez, L. A.**, “*Serendipitous Nebular-phase JWST Imaging of SNIa 2021aefx: Testing the Confinement of 56-Co Decay Energy*”, 2023, submitted to ApJ, arXiv:2301.05718
54. Sarbadhichary, S. K., Thompson, T. A., **Lopez, L. A.**, Mathur, S., “*On Odd Radio Circles as Supernova Remnants*”, 2023, submitted to MNRAS, arXiv:2209.10554
53. Mayker Chen, N.[†], Leroy, A. K., **Lopez, L. A.**, and 19 other authors, “*Comparing the Locations of Supernovae to CO(2-1) Emission in Their Host Galaxies*”, 2023, ApJ, in press, arXiv:2212.09766
52. Lopez, S.[†], **Lopez, L. A.**, Nguyen, D. D., Thompson, T. A., Mathur, S., Bolatto, A. D., Vulic, N., Sardone, A., “*X-ray Properties of NGC 253’s Starburst-Driven Outflow*”, 2023, ApJ, 942, 108, arXiv:2209.09260

51. Nguyen, D. D.[†], Thompson, T. A., Schneider, E. E., Lopez, S., **Lopez, L. A.**, “*Dynamics of Hot Galactic Winds Launched from Spherically-Stratified Starburst Cores*”, 2023, MNRAS, 518, L87, arXiv:2210.07193
50. Barnes, A. T., Chandar, R., Kreckel, K. and 32 other authors including **Lopez, L. A.**, “*Linking stellar populations to H II regions across nearby galaxies. I. Constraining pre-supernova feedback from young clusters in NGC 1672*”, 2022, A&A, 662, 6, arXiv:2205.05679
49. Rosen, A. L.[†], Offner, S. S. R., Foley, M. M., **Lopez, L. A.**, “*Blowing Bubbles Around Intermediate-Mass Stars: Feedback from Main-Sequence Winds is not Enough*”, 2022, ApJ, in press, arXiv:2107.12397
48. Eibensteiner, C., Barnes, A. T., Bigiel, F., and 30 other authors including **Lopez, L. A.**, “*A 2-3 mm high-resolution molecular line survey towards the centre of the nearby spiral galaxy NGC 6946*”, 2022, A&A, 659, A173, arXiv:2201.02209
47. Lee J. C., Whitmore, B. C., Thilker, D. A., and 51 other authors including **Lopez, L. A.**, “*The PHANGS-HST Survey: Physics at High Angular Resolution in Nearby Galaxies with the Hubble Space Telescope*”, 2022, 258, 10, arXiv:2101.02855
46. Barnes, A. T., Glover, S. C. O., Kreckel, K. and 28 other authors including **Lopez, L. A.**, “*Comparing the Pre-SNe Feedback and Environmental Pressures for 6000 HII Regions Across 19 Nearby Spiral Galaxies*”, 2021, MNRAS, 508, 5362, arXiv:2110.05492
45. Bolatto, A. D., Leroy, A. K., Levy, R. C., and 10 other authors including **Lopez, L. A.**, “*ALMA Imaging of a Galactic Molecular Outflow in NGC4945*”, ApJ, 923, 83, arXiv:2109.10437
44. Cronin, S. A.[†], Utomo, D., Leroy, A. K., Behrens, E. A., Chastanet, J., Holland-Ashford, T., Koch, E. W., **Lopez, L. A.**, Sandstrom, K. M., Williams, T. G. “*Local Environments of Low-Redshift Supernovae*”, ApJ, 923, 86, arXiv:2109.07453
43. Leroy, A. K., Schinnerer, E., Hughes, A., and 69 other authors including **Lopez, L. A.**, “*PHANGS-ALMA: Arcsecond CO(2-1) Imaging of Nearby Star-Forming Galaxies*”, 2021, ApJS, 257, 43, arXiv:2104.07739
42. Jayasinghe, T., Stanek, K. Z., Thompson, T. A., Kochanek, C. S., Rowan, D. M., Valley, P. J., Strassmeier, K. G., Weber, M., Hinkle, J. T., Hamsch, F.-J., Martin, D., Prieto, J. L., Pessi, T., Huber, D., Auchettl, K., **Lopez, L. A.**, Ilyin, I., Badenes, C., Howard, A. W., Isaacson, H., Murphy, S. J., “*A Unicorn in Monoceros: the 3 M_{sun} Dark Companion to a Bright, Nearby Red Giant V723 Mon is a Non-interacting, Mass-Gap Black Hole Candidate*”, 2021, ApJ, in press, arXiv:2101.02212
41. Olivier, G. M.[†], **Lopez, L. A.**, Rosen, A. L., Nayak, O., Rieter, M., Krumholz, M. R., Bolatto, A. D., “*Evolution of Stellar Feedback in HII Regions*”, 2021, ApJ, 908, 68, arXiv:2009.10079
40. Payne, A., Shappee, B. J., Hinkle, J. T., Valley, P. J., Kochanek, C. S., Holoiien, T. W.-S., Auchettl, K., Stanek, K. Z., Thompson, T. A., Neustadt, J. M. M., Tucker, M. A., Armstrong, J. A., Brimacombe, J., Cacella, P., Cornect, R., Denneau, L., Fausnaugh, M. M., Flewelling, H., Grupe, D., Heinze, A. N., **Lopez, L. A.**, Monard, B., Prieto, J. L., Schneider, A. C., Sheppard, S. S., Tonry, J. L., Weiland, H., “*ASASSN-14ko is a Periodic Nuclear Transient in ESO 253–G003*”, 2021, ApJ, 910, 125, arXiv:2009.03321
39. Picquenot, A., Acero, F., Holland-Ashford, T.[†], **Lopez, L. A.**, Bobin, J., “*Three-Dimensional Morphological Asymmetries in the Ejecta of Cassiopeia A Using a Component Separation Method in X-rays*”, 2021, A&A, 646, 82, arXiv:2102.01507
38. Holland-Ashford, T.[†], **Lopez, L. A.**, Auchettl, K.[†], “*Spatially-Resolved Study of Recombining Plasma in W49B Using XMM-Newton*”, 2020, ApJ, 903, 108, arXiv:2007.11593

37. **Lopez, L. A.**, Mathur, S., Nguyen, D. D., Thompson, T. A., Olivier, G. M.[†], “*Temperature and Metallicity Gradients in the Hot Gas Outflows of M82*”, 2020b, ApJ, 904, 152, arXiv:2006.08623
36. Martínez-Rodríguez, H.[†], **Lopez, L. A.**, Auchettl, K.[†], Badenes, C., Holland-Ashford, T.[†], Patnaude, D. J., Lee, S.-H., Foster, A. R., Slane, P. O., “*Evidence of a Type Ia Progenitor for Supernova Remnant 3C 397*”, 2020, submitted to MNRAS, arXiv:2006.08681
35. Fukushima, K., Yamaguchi, H., Slane, P. O., Park, S., Katsuda, S., Sano, H., **Lopez, L. A.**, Plucinsky, P. P., Kobayashi, S. B., Matsushita, K. “*Element Stratification in the Middle-Aged Type Ia Supernova Remnant G344.7–0.1*”, 2020, ApJ, 897, 62, arXiv:2005.09664
34. Rodriguez Martinez, R.[†], **Lopez, L. A.**, Shappee, B. J., Schmidt, S. J., Jayasinghe, T., Kochanek, C. S., Auchettl, K.[†], Holoiien, T. W.-S. “*A Catalog of M-Dwarf Flares with ASAS-SN*”, 2020, ApJ, 892, 2, arXiv:1912.05549
33. **Lopez, L. A.**, Grefenstette, B. W., Auchettl, K.[†], Madsen, K. K., Castro, D. “*Evidence of Particle Acceleration in the Superbubble 30 Doradus C with NuSTAR*”, 2020a, ApJ, 893, 144, arXiv:1811.12416
32. Holland-Ashford, T.[†], **Lopez, L. A.**, Auchettl, K.[†], “*Asymmetries of Heavy Elements in the Young Supernova Remnant Cassiopeia A*”, 2020, ApJ, 889, 144, arXiv:1904.06357
31. Madsen, K. K., Fryer, C. L., Grefenstette, B. W., **Lopez, L. A.**, Reynolds, S., Zoglauer, A. “*NuSTAR Observations of G11.2–0.3*”, 2020, ApJ, 889, 23, arXiv:2002.12775
30. Stafford, J. N.[†], **Lopez, L. A.**, Auchettl, K.[†], Holland-Ashford, T.[†] “*The Age Evolution of the Radio Morphology of Supernova Remnants*”, 2019, ApJ, 884, 113 arXiv:1808.08234
29. Auchettl, K.[†], **Lopez, L. A.**, Badenes, C., Ramirez-Ruiz, E., Beacom, J. F., Holland-Ashford, T.[†], “*Measurement of the Core-collapse Progenitor Mass Distribution of the Small Magellanic Cloud*”, 2019, ApJ, 871, 64, arXiv:1804.10210
28. The Lynx Team (23 authors including **Lopez, L. A.**), “*The Lynx Mission Concept Study Interim Report*”, 2018, submitted to NASA HQ, arXiv:1809.09642
27. **Lopez, L. A.**, Auchettl, K.[†], Linden, T., Bolatto, A. D., Thompson, T. A., Ramirez-Ruiz, E., “*Evidence for Cosmic-ray Escape from the Small Magellanic Cloud Using Fermi Gamma Rays*”, 2018, ApJ, 867, 44, arXiv:1807.06595
26. **Lopez, L. A.** & Fesen, R. A., “*The Morphologies and Kinematics of Supernova Remnants*”, 2018, Space Science Reviews, 214, 44, arXiv:1804.00024
25. Holland-Ashford, T.[†], **Lopez, L. A.**, Auchettl, K., Temim, T., Ramirez-Ruiz, E., “*Comparing Neutron Star Kicks to Supernova Remnant Asymmetries*”, 2017, ApJ, 844, 84, arXiv:1705.08454
24. Auchettl, K.[†], Ng, C. Y., Wong, B. T. T., **Lopez, L. A.**, Slane, P. O., “*An XMM-Newton Study of the Mixed-Morphology Supernova Remnant G346.6–0.2*”, 2017, ApJ, 847, 121, arXiv:1707.09370
23. Grefenstette, B. W., Fryer, C. L., Harrison, F. A., Boggs, S. E., DeLaney, T., Laming, M. J., Reynolds, S. P., Alexander, D. M., Barret, D., Christensen, F. E., Craig, W. W., Forster, K., Giommi, P., Hailey, C. J., Hornstrup, A., Kitaguchi, T., Kolgin, J. E., **Lopez, L. A.**, Mao, P. A., Madsen, K. K., Miyasaka, H., Mori, M., Perri, M., Pivovarov, M. J., Puccetti, S., Rana, V., Stern, D., Westergaard, N. J., Wik, D. R., Zhang, W. W., Zoglauer, A., “*The Distribution of Radioactive Titanium in Cassiopeia A*”, 2017, ApJ, 834, 19, arXiv: 1612.02774
22. Yamaguchi, H., Katsuda, S., Castro, D., Williams, B. J., **Lopez, L. A.**, Slane, P. O., Smith, R. K., Petre, R., “*The Refined Shock Velocity of the X-ray Filaments in the RCW 86 Northeast Rim*”, 2016, ApJL, 820, L3, arXiv:1602.08551

21. **Lopez, L. A.**, Grefenstette, B. W., Reynolds, S. P., An, H., Boggs, S. E., Christensen, F. E., Craig, W. W., Eriksen, K. A., Fryer, C. L., Hailey, C. J., Harrison, F. A., Madsen, K. K., Stern, D. K., Zhang, W. W., Zoglauer, A., “*A Spatially Resolved Study of the Synchrotron Emission and Titanium in Tycho’s Supernova Remnant Using NuSTAR*”, 2015, *Astrophysical Journal*, 814, 132, arXiv:1504.07238
20. Grefenstette, B. W., Reynolds, S. P., Harrison, F. A., Humensky, B., Boggs, S. E., Fryer, C. L., DeLaney, T., Madsen, K. K., Miyasaka, H., Wik, D. R., Zoglauer, A., Forster, K., Kitaguchi, T., **Lopez, L. A.**, Nynka, M., Christensen, F. E., Craig, W. W., Hailey, C. J., Stern, D., Zhang, W. W., “*Locating the Most Energetic Electrons in Cas A*” 2015, *Astrophysical Journal*, 802, 15, arXiv:1502.03024
19. Rosen, A. L.[†], **Lopez, L. A.**, Krumholz, M. R., Ramirez-Ruiz, E., “*Gone with the Wind: Where is the Missing Stellar Wind Energy from Massive Star Clusters?*”, 2014, *MNRAS*, 442, 2701, arXiv:1405.1427
18. **Lopez, L. A.**, Castro, D., Slane, P. O., Ramirez-Ruiz, E., “*Identification of a Jet-Driven Supernova Remnant in the Small Magellanic Cloud: Evidence for the Enhancement of Bipolar Explosions at Low Metallicity*”, 2014, *ApJ*, 788, 5, arXiv:1310.4498
17. Gonzalez-Casanova, D. F.[†], de Colle, F., Ramirez-Ruiz, E., **Lopez, L. A.**, “*The Morphology and Dynamics of Jet-Driven Supernova Remnants: The Case of W49B*”, 2014, *ApJL*, 781, L26, arXiv:1309.7049
16. **Lopez, L. A.**, Krumholz, M. R., Bolatto, A. D., Prochaska, J. X., Ramirez-Ruiz, E., Castro, D., “*The Role of Stellar Feedback in the Dynamics of HII Regions*”, 2014, *ApJ*, 795, 121, arXiv:1309.5421
15. Castro, D., **Lopez, L. A.**, Slane, P. O., Yamaguchi, H., Ramirez-Ruiz, E., Figueroa-Feliciano, E., “*A Chandra View of Non-thermal Emission in the Northwest of Supernova Remnant RCW 86: Particle Acceleration and Magnetic Fields*”, 2013, *ApJ*, 779, 49, arXiv:1309.2936
14. **Lopez, L. A.**, Pearson, S.[†], Ramirez-Ruiz, E., Castro, D., Yamaguchi, H., Slane, P. O., Smith, R. K., “*Unraveling the Origin of Overionized Plasma in the Galactic Supernova Remnant W49B*”, 2013, *ApJ*, 777, 145, arXiv:1309.1464
13. Peters, C. L.[†], **Lopez, L. A.**, Ramirez-Ruiz, E., Stassun, K. G., Figueroa-Feliciano, E., “*Constraining Explosion Type of Young Supernova Remnants Using 24 μ m Emission Morphology*”, 2013, *ApJL*, 771, L38, arXiv:1306.3503
12. **Lopez, L. A.**, Ramirez-Ruiz, E., Castro, D., Pearson, S.[†], “*The Galactic Supernova Remnant W49B Likely Originates from a Jet-Driven Core-Collapse Explosion*”, 2013, *ApJ*, 764, 50, arXiv:1301.0618
11. Dahle, H., Sarazin, C. L., **Lopez, L. A.**, Kouveliotou, C., Patel, S. K., Rol, E., van der Horst, A. J., Fynbo, J., Wijers, R., Burrows, D. N., Gehrels, N., Grupe, D., Ramirez-Ruiz, E., Michalowski, M., “*The Burst Cluster: Dark Matter in a Cluster Merger Associated with the Short GRB 050509B*”, 2013, *ApJ*, 772, 23 arXiv:1305.4660
10. Saez, C., Brandt, W. N., Shemmer, O., Chomiuk, L., **Lopez, L. A.**, Marshall, H. L., Miller, B. P., Vignali, C. “*The X-ray Properties of Typical High-Redshift Radio-Loud Quasars*”, 2011, *ApJ*, 738, 53, arXiv:1106.2557
9. **Lopez, L. A.**, Krumholz, M. K., Bolatto, A., Prochaska, J. X., Ramirez-Ruiz, E. “*What Drives the Expansion of Giant HII Regions?: A Study of Stellar Feedback in 30 Doradus*”, 2011, *ApJ*, 731, 91, arXiv:1008.2383

8. Alatalo, K., Blitz, L., Young, L. M., Davis, T. A., Bureau, M., **Lopez, L. A.**, and the Atlas3D Team, “*Discovery of an AGN-Driven Molecular Outflow in the Local Early-Type Galaxy NGC 1266*”, 2011, ApJ, 735, 88, arXiv:1104.2326
7. **Lopez, L. A.**, Ramirez-Ruiz, E., Huppenkothen, D.†, Badenes, C., Pooley, D. A. “*Using the X-ray Morphology of Young Supernova Remnants to Constrain Explosion Types, Ejecta Distribution, and Chemical Mixing*”, 2011, ApJ, 732, 114, arXiv:1011.0731
6. Bigiel, F., Bolatto, A. D., Leroy, A., Blitz, L., Walter, F., Rosolowsky, E., **Lopez, L. A.**, Plambeck, D., “*Unusually Luminous Giant Molecular Clouds in the Outer Disk of M33*”, 2010, ApJ, 725, 1159, arXiv:1010.2751
5. **Lopez, L. A.**, Ramirez-Ruiz, E., D., Badenes, C., Huppenkothen, D.†, Jeltama, T. E., Pooley, D. A. “*Typing Supernova Remnants Using X-ray Line Emission Morphologies*”, 2009, ApJL, 706, L106, arXiv:0910.3208
4. **Lopez, L. A.**, Ramirez-Ruiz, E., D., Pooley, D. A., Jeltama, T. E. “*Tools to Dissect Supernova Remnants Observed with Chandra: Methods and Application to the Galactic Remnant W49B*”, 2009, ApJ, 691, 875, arXiv:0810.0009
3. Prochaska, J. X., Sheffer, Y., Perley, D. A., Bloom, J. S., **Lopez, L. A.**, Dessauges-Zavadsky, M., Chen, H.-W., Filippenko, A. V., Ganeshalingam, M., Li, W., Miller, A. A., Starr, D. “*First Detection of Molecular Gas in a GRB Host Galaxy*”, 2009, ApJL, 691, L27, arXiv:0901.0556
2. **Lopez, L. A.**, Brandt, W. N., Vignali, C., Schneider, D. P., Chartas, G., Garmire, G. “*A Chandra Snapshot Survey of Representative High-Redshift Radio-Loud Quasars from the PMN Sample*”, 2006, AJ, 131, 1914, arXiv: astro-ph/0601037
1. **Lopez, L. A.**, Marshall, H. L., Canizares, C. R., Kane, J. F., Schulz, N. S. “*Determining the Nature of the SS 433 Binary from an X-ray Spectrum During Eclipse*”, 2006, ApJ, 650, 338, arXiv: astro-ph/0605574

†denotes advised students and postdocs

White Papers

6. **Lopez, L. A.**, Williams, B. J., Safi-Harb, S., Park, S., Plucinsky, P. P., Pooley, D. A., Temim, T., Auchettl, K., Badenes, C., Bamba, A., Castro, D., Garofali, K., Leahy, D., Slane, P., Vink, J., Williams, B. J., Wheeler, J. C. “*Supernova Remnants in High Definition*”, Astro2020 Decadal White Paper, BAAS, 51, 454, arXiv: 1903.09677
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