

Abigail J. Lee

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EDUCATION

University of Chicago <i>Ph.D. Student, Astronomy & Astrophysics</i> Advised by Wendy Freedman	Chicago, IL <i>Expected 2024</i>
University of Pennsylvania <i>B.A., Physics (with Honors); Minors in Mathematics and Classical Studies, summa cum laude</i> Advised by Gary Bernstein	Philadelphia, PA <i>May 2019</i>

AWARDS & FELLOWSHIPS

Chambliss Astronomy Achievement Award for Best Poster <i>237th Meeting of the American Astronomical Society</i>	2021
McCormick Fellowship <i>University of Chicago</i>	2019 – 2021
Elaine K. Bernstein Women in Science Award <i>University of Chicago</i>	2019
NASA Pennsylvania Space Grant Undergraduate Scholarship <i>NASA</i>	2018
University Scholars Research Grant <i>University of Pennsylvania</i>	2016, 2017

RESEARCH POSITIONS

Graduate Research Assistant, UChicago	2019 – Present
Undergraduate Research Assistant, Penn	2016 – 2019
Summer Undergraduate Research Assistant, Stanford KIPAC	2018
Summer Undergraduate Research Assistant, Max Planck Institute for Gravitational Physics	2017
Summer Intern, NASA Jet Propulsion Laboratory	2017

PUBLICATIONS

1. **Lee, A. J.**, Freedman, W. L., Madore, B. F., Owens, K. A., Monson, A. J., Hoyt, T. J. *The Astrophysical Distance Scale III: Distance to the Local Group Galaxy WLM using Multi-Wavelength Observations of the Tip of the Red Giant Branch, Cepheids, and JAGB Stars*. 2021, [ApJ](#), **907** 112.
2. Vishnubhotla, R., Ping, J., Gao, Z., **Lee, A.**, Saouaf, O., Vrudhula, A., Johnson, A. T. C. *Scalable Graphene Aptasensors for Drug Quantification* 2017, [AIP Advances](#) **7**, 115111.

TELESCOPE ALLOCATIONS

Co-I: HST (PI: Wendy Freedman) <i>An Independent Appraisal of the Cepheid Distance Scale</i>	2020
Co-I: HST (PI: Wendy Freedman) <i>Absolute Magnitude Calibration of Type Ia SNe at 1%</i>	2020

TEACHING EXPERIENCE

Guest Lecturer , UChicago, ASTR 12710, <i>Galaxies</i>	2020
Teaching Assistant , UChicago, ASTR 12710, <i>Galaxies</i>	2020
Teaching Assistant , UChicago, ASTR 12700, <i>Stars</i>	2019
Teaching Assistant , Penn, PHYS 150, <i>Classical Mechanics</i>	2019
Observing Labs Teaching Assistant , Penn, ASTR 001, <i>Survey of the Universe</i>	2018, 2019

Teaching Assistant , Penn, PHYS 102, <i>E&M, Optics, and Modern Physics</i>	2018
Lab Teaching Assistant , Penn, PHYS 101, <i>Classical Mechanics</i>	2017
Tutor , Penn Physics Department	2016, 2017

CONTRIBUTED TALKS

Distance to WLM Using Observations of the TRGB, Cepheids, and JAGB Stars <i>237th Meeting of the American Astronomical Society</i>	2021
Characterizing the temporal variability of backscatter in prep. for the NISAR mission <i>2017 AGU Fall Meeting</i>	2017
Characterizing Backscatter Variability using UAVSAR <i>2017 Gulf Coast Undergraduate Research Symposium</i>	2017
Improved Performance in Graphene & MoS₂ FETs using a BN Isolation Layer <i>2017 Emerging Researchers National Conference in STEM</i>	2017

SERVICE & OUTREACH

Advising & Mentorship Working Group <i>UChicago Astronomy & Astrophysics Department</i>	2020 – Present
Inclusion, Diversity and Equity in Astronomy Club Member <i>UChicago Astronomy & Astrophysics Department</i>	2019 – Present
Graduate Student Peer Mentor <i>UChicago Astronomy & Astrophysics Department, Society of Women in Physics</i>	2019 – Present
Instructor <i>Space Explorers Institute</i>	2019 – Present
Faculty Meeting Graduate Student Representative <i>UChicago Astronomy & Astrophysics Department</i>	2019 – 2020
Board Member <i>Penn Society of Physics Students</i>	2018 – 2019
Observing Nights Organizer <i>Penn Physics & Astronomy Department</i>	2018 – 2019
Astronomy Tutor <i>Veterans Upward Bound</i>	2018 – 2019