

# Abigail J. Lee

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## EDUCATION

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

## AWARDS & FELLOWSHIPS

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<b>McCormick Fellowship</b> <i>University of Chicago</i>	2019 – 2021
<b>Elaine K. Bernstein Women in Science Award</b> <i>University of Chicago</i>	2019
<b>NASA Pennsylvania Space Grant Undergraduate Scholarship</b> <i>NASA</i>	2018
<b>University Scholars Research Grant</b> <i>University of Pennsylvania</i>	2016, 2017

## RESEARCH POSITIONS

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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

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1. **Lee, A. J.**, Freedman, W. L., Madore, B. F., Owens, K. A., Monson, A. 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*, submitted to ApJ.
2. Porth, L., **Lee, A. J.**, Bernstein, G. M., *Reconstructing the Initial Power Spectrum using Hamiltonian Monte Carlo Techniques*, in prep.
3. Vishnubhotla, R., Ping, J., Gao, Z., **Lee, A.**, et al., *Scalable Graphene Aptasensors for Drug Quantification*, 2017, AIP Advances 7, 115111.

## TELESCOPE ALLOCATIONS

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

## TEACHING EXPERIENCE

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<b>Guest Lecturer</b> , UChicago, ASTR 12710, <i>Galaxies</i>	2020
<b>Teaching Assistant</b> , UChicago, ASTR 12710, <i>Galaxies</i>	2020
<b>Teaching Assistant</b> , UChicago, ASTR 12700, <i>Stars</i>	2019
<b>Teaching Assistant</b> , Penn, PHYS 150, <i>Classical Mechanics</i>	2019
<b>Observing Labs Teaching Assistant</b> , Penn, ASTR 001, <i>Survey of the Universe</i>	2018, 2019
<b>Teaching Assistant</b> , Penn, PHYS 102, <i>E&amp;M, Optics, and Modern Physics</i>	2018
<b>Lab Teaching Assistant</b> , Penn, PHYS 101, <i>Classical Mechanics</i>	2017
<b>Tutor</b> , Penn Physics Department	2016, 2017

## CONTRIBUTED TALKS

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<b>Characterizing the temporal variability of backscatter in prep. for the NISAR mission</b> <i>2017 AGU Fall Meeting</i>	2017
<b>Characterizing Backscatter Variability using UAVSAR</b> <i>2017 Gulf Coast Undergraduate Research Symposium</i>	2017
<b>Improved Performance in Graphene &amp; MoS<sub>2</sub> FETs using a BN Isolation Layer</b> <i>2017 Emerging Researchers National Conference in STEM</i>	2017

## SERVICE & OUTREACH

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