

Abigail Lee

CONTACT INFORMATION	<i>E-mail:</i> abbyl@uchicago.edu <i>Website:</i> https://abiglee7.github.io	UChicago Astronomy & Astrophysics ERC 534
EDUCATION	University of Chicago , Chicago, Illinois Ph.D. Student in Astronomy & Astrophysics 2019 – Present <ul style="list-style-type: none">• Advisor: Wendy Freedman University of Pennsylvania , Philadelphia, PA B.A. in Physics, <i>summa cum laude</i> , with distinction Class of 2019 <ul style="list-style-type: none">• Minors: Mathematics, Classical Studies• Thesis Title: <i>Reconstructing Log-normal Density Fields using Hamiltonian Monte Carlo Techniques</i>; Advisor: Gary Bernstein	
RESEARCH INTERESTS	Observational cosmology, Hubble constant, dark energy, lensing and galaxy surveys	
AWARDS	<ul style="list-style-type: none">[1] McCormick Fellowship, University of Chicago (2019-2021)[2] Elaine K. Bernstein Women in Science Award, University of Chicago (2019)[3] University Scholar Research Grant, University of Pennsylvania (2016 - 2018)[4] NASA Pennsylvania Space Grant Undergraduate Scholarship (2018)	
EMPLOYMENT	Graduate Research Assistant, University of Chicago, Chicago, IL	October 2019 – Present
	Research Assistant, University of Pennsylvania, Philadelphia, PA	May 2016 – July 2019
	Research Assistant, Stanford University, Stanford, CA	June 2018 – August 2018
	Research Assistant, Max Planck Institute for Gravitational Physics, Potsdam, Germany	July 2017 – August 2017
	Summer Intern, NASA Jet Propulsion Laboratory, Pasadena, CA	May 2017 – July 2017
TEACHING EXPERIENCE	University of Chicago , Chicago, IL Teaching Assistant, Fall 2019 – Present <ul style="list-style-type: none">• ASTR 12700 (24 students), Fall 2019 University of Pennsylvania , Philadelphia, PA Teaching Assistant, Fall 2017 – May 2019 <ul style="list-style-type: none">• PHYS 150 (60 students), Spring 2019• ASTR Observing Labs (150 students), Fall 2018, Spring 2019• PHYS 102 E&M, Optics, and Modern Physics (50 students), Spring 2018• PHYS 101 Mechanics Lab (15 students), Fall 2017 Physics Tutor, Fall 2016 – Spring 2017	
JOURNAL PUBLICATIONS	<ul style="list-style-type: none">[1] R. Vishnubhotla, J. Ping, Z. Gao, A. Lee, O. Saouaf, A. Vrudhula, A. T. Johnson. <i>Scalable Graphene Aptasensors for Drug Quantification</i>. <i>AIP Advances</i> 7, 115111 (2017).	

ORAL & POSTER PRESENTATIONS	<p>[1] A. Lee. Dark Matter Subhalo Disruption. <i>Stanford Summer Research Program Undergraduate Talks</i>, Stanford, CA. August 2018.</p> <p>[2] M. Lavalley, G. Shiroma, A. Lee, P. Rosen. Characterizing the temporal variability of L-band backscatter using dense UAVSAR time-series in preparation for the NISAR mission. <i>2017 AGU Fall Meeting</i>, New Orleans, LA, December 2017 (could not attend).</p> <p>[3] A. Lee. Characterizing Backscatter Variability using UAVSAR. <i>2017 Gulf Coast Undergraduate Research Symposium</i>, Rice University, Houston, Texas. November 2017.</p> <p>[4] A. Lee. Characterizing Backscatter Variability using UAVSAR. <i>NASA Jet Propulsion Lab Final Presentation</i>, NASA JPL, Pasadena, CA. July 2017.</p> <p>[5] A. Lee. Improved Performance in Graphene and MoS₂ Field-Effect Transistors using a Boron Nitride Isolation Layer. <i>2017 Emerging Researchers National Conference in STEM</i>, Washinton D.C. February 2017.</p>
PROFESSIONAL SERVICE & OUTREACH	<p>Mentor, Society of Women in Physics Peer Mentorship Program, UChicago (2019 – Present)</p> <p>Faculty Meeting Representative, UChicago (2019 – Present)</p> <p>Member, Inclusion, Diversity and Equity in Astronomy, UChicago (2019 – Present)</p> <p>Astronomy Observing Nights Organizer (Organized 3 public telescope observing nights), Penn (2018-2019)</p>
SKILLS	<p>Programming Languages:</p> <ul style="list-style-type: none"> • PYTHON, MATHEMATICA, SQL, \LaTeX • UNIX shell (Bash) scripting
LANGUAGES	<p>English (fluent), Spanish (conversational)</p>