

Eileen C. Gonzales

51 Pegasi b Postdoctoral Fellow | Cornell University, 318 Space Sciences Building, Ithaca, NY 14853
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Education

- 08/2015–08/2020 PhD in Physics, CUNY Graduate Center, NY, Advisor: Dr. Jackie Faherty
Understanding Atmospheres Across the Stellar-Substellar Boundary
(M.A. 2019- Hunter College, MPhil 2019- Graduate Center)
- 08/2011–12/2014 M.S. Physics concentration in Astronomy, San Francisco State University, CA
Advisor: Dr. Adrienne Cool, Thesis: *Commissioning the refurbished 30-inch Leuschner telescope and its capabilities to detect transiting exoplanets*
- 08/2006–05/2010 B.S. Astrophysics (Dual Major in German), Michigan State University, MI
Advisor: Horace Smith, Senior Thesis: *RR Lyrae and the Blazhko Effect*

Related Work Experience

- 2020–present **51 Pegasi b Postdoctoral Fellow**, Cornell University, Ithaca, NY
- 2019–2020 **Non-Teaching Adjunct**, Macaulay Honors College, New York, NY
- 2018–2019 **Non-Teaching Adjunct**, College of Staten Island, Staten Island, NY
- 2017–2019 **Research Mentor**, American Museum of Natural History, New York, NY
- Fall 2017 **Adjunct Lecturer**, Hunter College, New York, NY
- Spring 2016 **Physics Tutor**, Self Employed
- Spring 2015 **Lecturer**, San Francisco State University, San Francisco, CA
- 2011–2014 **Graduate Teaching Associate**, San Francisco State University, San Francisco, CA
- 2013–2014 **Telescope Workshop Instructor**, San Francisco State University, San Francisco, CA
- Sum. 2008 **Intern**, Institute for Experimental and Applied Physics, University of Kiel, Kiel, Germany

Honors and Awards

- 2021 **ExoExplorer**, NASA ExoExplorers Program inaugural cohort
- 2020 **51 Pegasi b Fellowship in Planetary Astronomy**, Heising-Simons Foundation
(Three-year, \$375,000 grant)
- 2019 **Mina Rees Dissertation Fellowship in the Sciences**, City University New York Graduate Center
(Dissertation Year support, \$25,000)
- 2019 **Ford Dissertation Fellowship Honorable Mention**, Ford Foundation
- 2018 **Beth Brown Memorial Award**, National Society of Black Physicists 2018 Conference
(Best oral presentation in astronomy: *Is TRAPPIST-1 a Unique M-dwarf Host Star*)
- 2018 **Third Place Prize Graduate Student Poster Competition**, Cool Stars 20
- 2018 **Graduate Student Prize**, Astronomical Society of New York
- 2018 **Chambliss Honorable Mention**, AAS 231st Meeting
(Poster: *Examining Cloud, Metallicity, and Gravity signatures in Brown Dwarfs*)
- 2017 **NSF AGEP**, National Science Foundation Supplemental Award
(\$36,000/year salary support, renewed for a total of 3 years)
- 2017 **LSSTC Data Science Fellow**, Large Synoptic Survey Telescope Corporation
Two-year program of 6 week-long intensive data science workshops
- 2016 **NIGMS RISE Fellowship**, National Institute of Health
(\$30,000/year salary, \$1,500/year travel funds, \$1,500/year research allowance, full tuition)
- 2015 **CUNY Science Scholar**, City University of New York Graduate Center
(AY 2015-2016: \$25,000 stipend and tuition, AY16-17, AY 17-18, AY 18-19, AY19-20: tuition)

2014 **Honorable Mention**, College of Science and Engineering Showcase San Francisco State Uni.
(Poster: *Calibration and first images from the refurbished Leuschner 30-inch Telescope*)

Refereed Publications

1. **Gonzales, E.C.**, Burningham, B., Faherty, J. K., Visscher, C., Marley, M., Lupu, R., Freedman, R., & Lewis, N.K. *The first retrieval of a substellar subdwarf: A cloud-free SDSS J125637.13-022452.4*, ApJ, 2021, 923, 19. [arXiv:2109.11000](https://arxiv.org/abs/2109.11000)
2. Faherty, J. K., Gagné, J., Popinchalk, M., (several authors), **Gonzales, E.C.** et al., *A Wide Planetary Mass Companion Discovered Through the Citizen Science Project Backyard Worlds: Planet 9*, ApJ, 2021, 923, 48. [arXiv:2108.05321](https://arxiv.org/abs/2108.05321)
3. Schneider, A. C., Meisner, M.A., Gagné, J., (several authors), **Gonzales, E.C.** et al., *Ross 19B: An Extremely Cold Companion Discovered via the Backyard Worlds: Planet 9 Citizen Science Project*, ApJ, 2021, 921, 140. [arXiv:2108.05321](https://arxiv.org/abs/2108.05321)
4. Burningham, B., Faherty, J. K., **Gonzales, E. C.**, Marley, M., Visscher, C., Lupu, R., Gaarn, J., Bieger, M.F., Freedman, R., & Saumon, D. *Cloud Busting: enstatite and quartz clouds in the atmosphere of 2M2224-0158*, MNRAS, 2021, 506, 1944. [arXiv:2105.0426](https://arxiv.org/abs/2105.0426)
5. Cubillos, P. E.; Keating, D.; Cowan, N. B.; Vos, J. M.; Burningham, B.; Ygouf, M.; Karalidi, T.; Zhou, Y.; **Gonzales, E. C.** *Longitudinally Resolved Spectral Retrieval (ReSpect) of WASP43b*, ApJ, 2021, 915, 45. [arXiv:2105.06353](https://arxiv.org/abs/2105.06353)
6. Kirkpatrick, J.D., Gelino, C.R., Faherty, J.K., (several authors), **Gonzales, E.C.** et al., *The Field Substellar Mass Function Based on the Full-sky 20 pc Census of 525 L, T, and Y Dwarfs*, ApJS, 2021, 253, 7. [arXiv:2011.11616](https://arxiv.org/abs/2011.11616)
7. **Gonzales, E.C.**, Burningham, B., Faherty, J. K., Cleary, C., Visscher, C., Marley, M., Lupu, R., & Freedman, R. *Retrieval of the d/sdL7+T7.5p binary SDSS J14162408+1348263AB*, ApJ, 2020, 905, 46. [arXiv:2010.01224](https://arxiv.org/abs/2010.01224)
8. Faherty, J.K., Goodman, S., Caselden, D., Colin, G., Kuchner, M. J., Meisner, A. M., Gagné, J., Schneider, A. C., **Gonzales, E. C.**, Bardalez Gagliuffi, D., Logdson, S. E., Allers, K., Burgasser, A.J., & The Backyard Worlds: Planet 9 Collaboration, *WISE2150-7250AB: A very low mass, wide co-moving brown dwarf system discovered through the citizen science project Backyard Worlds: Planet 9*. ApJ, 2020, 889,176. [arXiv:1911.04600](https://arxiv.org/abs/1911.04600)
9. **Gonzales, E.C.**, Faherty, J. K., Gagné, J., Teske, J., McWilliam, A., & Cruz, K. L. *A Reanalysis of the Fundamental Parameters and Age of TRAPPIST-1*. ApJ, 2019, 886, 131. [arXiv:1909.13859](https://arxiv.org/abs/1909.13859)
10. **Gonzales, E.C.**, Faherty, J. K., Gagné, J., Artigau, É., & Bardalez Gagliuffi, D. *Understanding Fundamental Properties and Atmospheric features of subdwarfs via a case study of SDSS J125637.13-022452.4*. ApJ, 2018, 864, 100. [arXiv:1807.04794](https://arxiv.org/abs/1807.04794)
11. Faherty, J.K., Gagné, J., Burgasser, A.J., Mamajek, E.E., **Gonzales, E.C.**, Bardalez Gagliuffi, D. C., & Marocco, F. *A Late-type L Dwarf at 11 pc Hiding in the Galactic Plane Characterized Using Gaia DR2*. ApJ, 2018, 868, 44. [arXiv:1805.01573](https://arxiv.org/abs/1805.01573)

Non-refereed Publications

12. **Gonzales, E.C.** et al. *Comparing PT profiles of Similar Temperature or Spectral Type Brown Dwarfs*, 2022, In prep.
13. Brown, C.D. & **Gonzales, E.** *Excellence and power in the Black physics community*. Nature Physics. 17, 3-4 (2021). <https://doi.org/10.1038/s41567-020-01140-9> Equal co-authors.
14. Gagné, J., **Gonzales, E.C.**, & Faherty, J.K. *A Gaia DR2 Confirmation that 2MASS J12074836-3900043 is a Member of the TW HYA Association*. RN AAS, 2018, 2, 2. [arXiv:1804.09625](https://arxiv.org/abs/1804.09625)

Invited Talks, Seminars, and Panels

- Feb. 2022 *Peering Through the Clouds: Investigating Substellar Atmospheres*, University of Maryland, Astronomy Colloquium, Virtual
- Feb. 2022 *Peering Through the Clouds: Investigating Substellar Atmospheres*, Amherst College, Physics & Astronomy Colloquium, Amherst, MA
- Dec. 2021 *Investigating Substellar Atmospheres*, Boston University Astronomy Colloquium, Boston, MA
- Aug. 2021 *Read Between the Lines: Retrievals of Substellar Objects*, 51 Pegasi b Virtual Summit
- June 2021 *Why Brown Dwarfs Should Be Your Friends: Lessons Learned From Their Atmospheric Retrievals*, ExoExplorers Science Series Talk, Virtual
- May 2021 *Characterizing Atmospheres of Low-Metallicity Brown Dwarfs*, University of California San Diego-San Diego State University Astronomy Seminar, Virtual
- Apr. 2021 Speaker on *Answering the Call for Diverse & Inclusive Voices in STEM* panel, Advanced Science Research Center, The Graduate Center City University of New York, Virtual
- Apr. 2021 *A Deep Dive into Exploring Substellar Atmospheres*, University of Washington, Astronomy Colloquium, Virtual
- Apr. 2021 Speaker on *Coll-G 133-STEM Careers Panel*, Group Scholars Program, Indiana University Bloomington, Virtual
- Mar. 2021 *Characterizing Atmospheres of Ultracool Subdwarfs*, Howard University, **Beth Brown Award Physics Colloquium**, Virtual
- Mar. 2021 *Understanding Atmospheres Across the Stellar-Substellar Boundary*, Rochester Institute of Technology, Astronomy Colloquium, Virtual
- Feb. 2021 *Understanding Atmospheres Across the Stellar-Substellar Boundary*, University of Delaware Department of Physics and Astronomy Seminar, Virtual
- Dec. 2020 *Understanding Atmospheres Across the Stellar-Substellar Boundary*, JILA/ University of Colorado Boulder Astrophysics Seminar, Virtual
- Nov. 2020 *Understanding Atmospheres Across the Stellar-Substellar Boundary*, Cornell Planetary Lunch Seminar, Ithaca, NY
- Oct. 2020 Speaker on the *How to Organize a Movement* Panel, Yale, Virtual panel
- Aug 2020 Speaker on the *Women+ of Color Project 2019 Reunion: The Path to Graduate School* Panel, Virtual panel
- Feb. 2020 *Understanding Atmospheres Across the Stellar-Substellar Boundary*, Center for Space & Habitability (CSH) Symposium, University of Bern, Bern Switzerland
- Jan. 2019 *A Reanalysis of the Age of TRAPPIST-1*, **Beth Brown Memorial Prize talk**, AAS 233, Seattle, WA
- Dec. 2018 *Is TRAPPIST-1 A Unique M-dwarf Host Star?*, Queensborough Community College Physics department Seminar, New York, NY
- Nov. 2018 Speaker on Women and Gender Minorities Panel Session at National Society of Black Physicists 2018 Conference, Columbus, OH
- July 2018 *Understanding Atmospheres of Subdwarfs via SDSS J1256-0224*, **Graduate Student Prize Talk**, Astronomical Society of New York 50th Meeting, New York, NY
- Feb. 2017 *Understanding Atmospheres of Subdwarfs via a case study of SDSS J1256-0224*, Harvard CfA Planets and Stars Seminar, Cambridge, MA
- Nov. 2017 *Understanding Atmospheres of Low-mass Stars, Brown Dwarfs, and Giant Exoplanets*, SACNAS, Salt Lake City, UT

Contributed Talks and Posters

- Jan. 2021 Talk: *Insights Discovered From Comparative Retrievals of Substellar Objects*, AAS 237, id. 314.04, Virtual
- Jan. 2021 Poster: *The Atmospheric Retrieval of the Brown Dwarf Gl229B*, co-author, AAS 237, id. 339.10, Virtual
- Aug. 2020 Talk: *Brewster Retrievals: From Brown Dwarfs and Directly-Imaged Exoplanets*, 51 Pegasi b Virtual Summit 2020
- Jan. 2020 Talk: *Understanding Atmospheres Across the Stellar-Substellar Boundary*, Dissertation Talk, AAS 235, Honolulu, HI
- Nov. 2019 Talk: *Spectral Retrieval of the binary 2MASS J1416+1348AB*, National Society of Black Physicists 2019, Providence, RI
- Oct. 2019 Talk: *Atmospheric Retrieval of the d/sdL7+T7.5p binary 2MASS J1416+1348AB*, BDEXOCON III, Newark, DE
- Sept. 2019 Talk: *Atmospheric Retrieval of the d/sdL7+T7.5p binary 2MASS J1416+1348AB*, Center for Computational Astrophysics GothamFest, New York, NY
- June 2019 Talk: *A Reanalysis of the Age of TRAPPIST-1*, TRAPPIST-1 Toward the comparative study of temperate terrestrial worlds- Liège, Belgium
- Jan. 2019 Poster: *Is TRAPPIST-1 a Unique M-dwarf Host Star?*, AAS 233, id#259.01, Seattle, WA
- Nov. 2018 Talk: *Is TRAPPIST-1 a Unique M-dwarf Host Star?*, National Society of Black Physicists 2018, Columbus, OH
- July 2018 Poster: *Is TRAPPIST-1 a Unique M-dwarf Host Star?*, Cool Stars 20, Poster #111, Cambridge, MA, DOI:[10.5281/zenodo.1420451](https://doi.org/10.5281/zenodo.1420451)
- July 2018 Poster: *The BDNYC Database of low-mass stars, brown dwarfs, and planetary mass companions*, co-author, Cool Stars 20, Cambridge, MA, DOI:[10.5281/zenodo.1478145](https://doi.org/10.5281/zenodo.1478145)
- Jan. 2018 Poster: *Examining Cloud, Metallicity, and Gravity signatures in Brown Dwarfs*, AAS 231 id.#347.37, National Harbor, MD
- Jan. 2018 Poster: *The BDNYC Database of low-mass stars, brown dwarfs, and planetary mass companions*, co-author, AAS 231, id.#349.33, National Harbor, MD
- Nov. 2017 Talk: *Understanding Atmospheres of Low-mass Stars, Brown Dwarfs, and Giant Exoplanets*, National Society of Black Physicists 2017, Moorehouse College, Atlanta, GA
- Oct. 2017 (Nov) and BDEXOCON II, University of Delaware, Newark, DE (Oct)
- Sept. 2017 Talk: *Understanding Atmospheres of Low-mass Stars, Brown Dwarfs, and Giant Exoplanets*, Astrofest, Columbia University, New York, NY
- June 2017 Poster: *Examining Cloud, Metallicity, and Gravity signatures in Brown Dwarfs*, Women in Astronomy IV, Austin TX and ERES III, Yale University, New Haven, CT
- Oct. 2016 Poster: *Examining gravity, clouds and metallicity signatures in young and old brown dwarfs*, National Society of Black Physicists Fall Workshop, Femi Lab
- Feb. 2015 Poster: *Testing the refurbished Leuschner 30-inch Telescope and its capabilities to detect transiting exoplanets*, AAS 225, id.#258.04, Seattle, WA (Jan) and National Society of Black Physicists 2015, Baltimore, MD (Feb)
- Jan. 2015
- May 2014 Poster: *Testing the refurbished Leuschner 30-inch Telescope and its ability to detect planets around other stars*, San Francisco State University College of Science and Engineering (COSE) Project Showcase (May) and San Francisco State University Graduate Research and Creative Works Showcase (April), San Francisco, CA
- Apr. 2014
- May 2014 Poster: *Calibration and first images from the refurbished Leuschner 30-inch Telescope*, co-author, COSE Showcase, San Francisco State University, San Francisco, CA

Dec. 2008 Poster: *TNS - A compact, light-weight sensor for thermal neutrons*, co-author, AGU Fall 2008 Meeting, id.#P53C-1458

Grants and Telescope Proposals

Raised nearly 1.5 million dollars to support research over the last 7 years.

- 2021 **NASA ROSES XRP-** \$513,931, (Science-PI, PI Jackie Faherty)
Read Between the Lines: Determining Atmosphere and Bulk Compositions for Planetary Mass Objects Using Special Retrievals
- 2021 **HST Cycle 29-** \$121,592, 6 orbits, (Co-I, PI Johanna Vos)
Atmospheric Structure and Spin Axis Alignment of an Overlooked Planetary-Mass Companion
- 2021 **JWST Cycle 1-** \$TBD, 5.2 Hours, (Co-I, PI Kielan Wilcomb), ID. #2044
Direct Imaging Spectroscopy of two Jovian Exoplanets: Characterization of the TYC 8998-760-1 Multi-Planetary System
- 2021 **JWST Cycle 1-** \$440,080, 24.6 Hours, (Co-I, PI Jackie Faherty), ID. #2124
Explaining the Diversity of Cold Worlds
- 2020 **51 Pegasi b Fellowship-** Heising-Simons Foundation three-year, \$375,000 grant
- 2019 **Amie James Science Travel Award-** \$1000 to support presentation at Cloud Academy II
- 2019 **Physics Tithe Fellowship-** \$509 AY 2019–2020 support at CUNY Graduate Center
- 2019 **Mina Rees Dissertation Fellowship in the Sciences-** Dissertation Year support, \$25,000
- 2019 **Cool Stars Travel Grant-** Covered registration (\$500) for Cool stars 20 conference
- 2019 **Doctoral Student Research Grant Round 13-** \$900 to attend Cool Stars 20 Conference
- 2017–2019 **NSF AGEP-** \$36,000/year salary support, supplemental award to PI:Emily Rice’s NSF
- 2018 **Physics Tithe Fellowship-** \$374 AY 2018–2019 support at CUNY Graduate Center
- 2018 **Sigma Xi Grant-In-Aid of Research-** \$3178 travel funds for observing run
- 2018 **AAS FAMOUS Travel Grant -** \$500 toward the attendance of the 231st AAS Meeting
- 2018A–2019 **NOAO Observing Proposal-** *Weather and aurorae on one of the Sun’s nearest neighbours*, (PI: J. Faherty), Co-I, 1 Night on SOAR Spartan
- 2017 **PSC-CUNY Research Award 2017-** (PI: Emily Rice), \$6,000 for observing trips
- 2016 **NIGMS RISE Fellowship-** \$30,000/year salary, \$1,500/year travel funds, \$1,500/year research allowance, full tuition
- 2015 **CUNY Science Scholar-** AY 2015–2016: \$25,000 stipend and full tuition
AY 2016–2017, AY 2017–2018, AY 2018–2019, and AY 2019–2020: full tuition
- 2015 **AAS FAMOUS Travel Grant-** \$1000 toward the attendance of the 225th AAS Meeting

Observing Experience

2019	IRTF/SpeX	1/2 night
2016–2018	Magellan/FIRE	9 nights
2016–2018	Magellan/ FOURSTAR	9 nights
2017	DuPont/CAPScam	1 night

Teaching Experience

Fall 2017 **Adjunct Lecturer**, Astro 102 (Laboratory Experiments in Astronomy), Hunter College
Taught one section of introductory astronomy lab for non-science majors, 20 students.

- Spring 2015 **Lecturer**, ASTR 116 (Astronomy Laboratory), San Francisco State University
Taught one section of Introductory Astronomy Lab for non-science majors, ~30 students
Prepared short lectures and activities to be done in the SFSU planetarium. Developed
and graded quizzes, homework, and exams.
- Spring 2015 **Lecturer**, PHYS 112 (General Physics I Laboratory), San Francisco State University
Taught one section of Introductory Physics Lab for science majors, ~30 students.
Developed and graded quizzes and homework.
- 2013–2014 **Leuschner Telescope Workshop Instructor**, San Francisco State University San
Francisco, CA. Taught students how to operate the Leuschner 30-inch Telescope
- Fall 2011–
Fall 2014 **Graduate Teaching Associate**, ASTR 116 (Astronomy Laboratory), San Francisco State
University. Taught two sections per semester of Introductory Astronomy Lab for non-
science majors, ~30 students. Prepared short lectures and activities to be done in the
SFSU planetarium. Developed and graded quizzes, homework, and exams. Part of group
rewriting labs to be inquiry based.

Advising/Mentoring Experience

- 2021–present Research Credits Advisor of Celia Toral, Cornell Undergraduate
- 2021–present Cornell Astronomy REU Co-Advisor for Jasmine Ramirez (UConn)
- 2020–2021 Mentor to a small cohort of students in Cornell Multicultural Academic Council (MAC)
Mentoring Program
- 2019–present Mentored Emily Calimari (CUNY GC graduate student) on atmospheric retrievals of
brown dwarfs
- 2018–2019 Co-Advisor of AMNH Helen Fellow (postbac) Colleen Cleary on subdwarf retrievals
- 2018–2019 Advisor of Makenzi Fischbach (HS Senior), Science Mentoring Research Program
- 2018–2019 Advisor of Dillion Murugesan (HS Junior), Science Mentoring Research Program
- 2018–2019 Advisor of Summer Williams (HS Junior), Science Mentoring Research Program
- 2017–2018 Advisor of Tony Zhu (HS Senior), Science Mentoring Research Program
- 2017–2018 Advisor of Nina Christenson (HS Junior), Science Mentoring Research Program
- 2017–2018 Advisor of Zephan D’Cruz (HS Junior), Science Mentoring Research Program
- 2017 Mentored Danya AbdelHameid (undergraduate), GradSpark Accelerator Program

K-12 Teaching and Mentoring Experience

- 2017–2019 **Research Mentor**, Science Research Mentoring Program, American Museum of Natural
History New York, NY. Advised high school students during a year-long research project.
- 2018 **Instructor**, American Museum of Natural History, New York, NY.
Co-taught two sessions of Wonderful Universe, an after school introductory astronomy
class for sophomore, junior, and senior high school students.
- 2014–2015 **Lego Engineer Instructor**, Play-Well TEKnologies, San Francisco/ San Mateo Area, CA
Taught K-5th graders engineering through play with Legos as an after school program or
birthday party. Created lesson plans to cover engineering concepts and building skills.
- Summers **Lead Science Instructor**, Camp Galileo, Woodside, CA
- 2012–2014 Taught 3rd-5th graders science projects related to weekly camp themes. Helped campers to
develop inquiry based learning skills using Galileo Innovation Approach.

- 2010–2011 **Guest Experience Team Member**, Impression 5 Science Center Lansing, MI
Taught science workshops for general public, school groups and birthday parties. Engaged with visitors on the floor by answering questions about exhibits and running small activities.
- 2008–2010 **America Reads Tutor**, Woodcreek Elementary, Lansing, MI
Worked with Kindergarten, 1st, 3rd and 4th graders to improve their reading and math skills. Read aloud in small groups and worked on math worksheets.

Professional Service

- 2020–present NSBP ASTRO Committee Member, NSBP 2020 and 2021 Conference session organization.
- 2018–present Women and Gender Minorities Committee Member, National Society of Black Physicists
- 2020–present Black In Physics Co-founder. One of the lead organizer of all events. Project Advisor for Partnerships Project, which has a large focus on fundraising efforts for our events.
- 2020-present Black In Physics Co-founder. Lead organizer of #BlackInPhysics Week 2020 and 2021 events Oct. 25-31 with professional panels, social events, articles, and community engagement via Twitter [@BlackInPhysics](#) and [blackinphysics.org](#). Helped raise \$8,000 for our 2020 events and ~\$85,000 for 2021 and 2022 events.
- July 2019 Executive Secretary, NASA XRP Panel
- 2017–2019 AMNH Astrophysics Department Seminar Committee, New York, NY
- Jan. 2019 Recruitment for CUNY Graduate Center Physics Program at Undergraduate Women in Physics Conference, Amherst College, Amherst, MA.
- Nov. 2017 Recruitment for CUNY Graduate Center Physics Program at National Society of Black Physicists 2017 Conference, Atlanta, GA.
- Apr. 2017 Bench Sciences Recruitment Video (Physics), CUNY Graduate Center. New York, NY
- 2013–2015 ASTR 116 Curriculum Revamp Committee, San Francisco State University, San Francisco CA. Rewrote astronomy lab curriculum to have an inquiry based focus.

Professional Service Grants

- 2021 **Heising-Simons-** \$74,732, PI
#BlackInPhysicsWeek: A week dedicated to connecting, celebrating, and highlighting the work of Black Physicist, Funding to support 2021 and 2022 #BlackInPhysicsWeek programming.

Professional Development and Trainings

- Winter 2022 **Culturally Mindful Mentoring Workshop.** A three part workshop series by Kelly Mack for 51 Pegasi b fellows on developing tools to mentor marginalized students.
- July 2021 **Sagan Summer Workshop.** Focused on Circumstellar Disks and Young Planets.
- Spring 2021 **Building Mentorship Skills for Academic Careers Training series.** Develop essential research mentoring skills, learn best practices for mentoring undergraduate, graduate, and postdoctoral researchers, and develop advising and communication skills needed to lead a research team.
- 2020-2021 **NextGen Professor Program.** 2020-2021 Cohort. Engaged in monthly meetings on topics related to professional and career development. Culminated in the Future Professors Institute.

2017-2019 **LSSTC Data Science Fellowship Program.** Two-year program of 6 week-long intensive data science workshops on topics of (1) Bayesian statistics, (2) image processing, (3) time-domain analysis and interactive visualizations, (4) machine learning and software engineering, and (5) scalable software and data storage with a focus on software engineering and databases.

Outreach

June 2021 APS and Black In Physics Juneteenth Freedom Day Edit-a-thon. Created Wikipedia pages to highlight Black physicists in partnership with the American Physical Society.

Feb. 2021 Black In Physics Wikithon. Created Wikipedia pages to highlight Black physicists in partnership with the American Institute of Physics.

Sept. 2020 Field Trip: Constellations. American Museum of Natural History's Youtube chat responder.

Aug. 2020 AAS Journal Author Series Chat on *Reanalysis of the Fundamental Parameters and Age of TRAPPIST-1*. Youtube presentation.

Aug. 2020 Morrison Planetarium "Cosmic Conversation", California Academy of Sciences. Virtual presentation on Morrison Planetarium's Facebook page.

Sept. 2019 Career Panel for Science Research Mentoring Program at the American Museum of Natural History. New York, NY

May 2019 Panel Presentation to Kingsbridge High School astronomy class. New York, NY

Jan. 2019 Astronaut Training, an adult comedy outreach game show at The Caveat. New York, NY

July 2018 Built solar powered cars with children and solar telescope observing at Bloomberg Summer Picnic. New York, NY

June 2018 Answered astronomy questions and Open Space planetarium software demonstrations at American Museum of Natural History ID Day. New York, NY

July 2017 Career Panel with American Museum of Natural History MEEP (college) and Saltz (high school) interns. New York, NY

June 2017 NRAO Facebook Live poster presentation at Women in Astronomy IV

Oct. 2014 Partial Solar Eclipse Event. Solar telescope observing and comet making with the general public. San Francisco State University, CA.

Fall 2012 Observatory Docent, San Francisco State University San Francisco, CA

Fall 2010 Volunteer, Impression 5 Science Center Lansing, MI

Fall 2009 Science Theatre Presenter, Michigan State University, East Lansing MI.

In the Media

Jan. 2021 Nature Physics: [Shining a Light on the Excellence and Power of the Black Physics Community](#)

Nov. 2020 Astrobites: [#BlackInPhysics week — meet the organizers](#)

Oct. 2020 Physics Today: [Meet the Organizers of #BlackInPhysics Week](#)

Oct. 2020 Physics World: [#BlackInPhysics Week set to celebrate Black Physicists](#)

Oct. 2020 Symmetry Magazine: [#BlackInPhysics week to build community, increase visibility](#)

Aug. 2020 AAS Journal Author Series Chat on *Reanalysis of the Fundamental Parameters and Age of TRAPPIST-1*. [Youtube presentation](#).