

# Addy J. Evans

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My ADS library: [tx.ag/addypapers](https://ui.adsabs.org/author/evans%20adele)

## EDUCATION

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**Texas A&M University**

Ph.D. in Astronomy

College Station, TX

May 2024

**Texas A&M University**

M.S. in Astronomy

College Station, TX

October 2021

**Oklahoma State University**

B.S. in Physics, Minor in Mathematics

Stillwater, OK

May 2019

## APPOINTMENTS

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- National Research Council Postdoctoral Associate, **Naval Research Laboratory** September 2024 - Present  
*Supervisor: Matthew Kerr*
- Postdoctoral Research Associate, **Texas A&M** June 2024 - September 2024  
*Supervisor: Louis Strigari*
- Office of Science Graduate Fellow, **Los Alamos National Lab** June 2022 - September 2022  
*Advisor: Pat Harding*
- Graduate research and teaching assistant, **Texas A&M University** August 2019–May 2024  
*Advisor: Louis Strigari*
- NSF-funded REU undergraduate research assistant, **University of New Mexico** Summer 2018  
*Advisor: Rouzbeh Allahverdi*
- Undergraduate research assistant, **Oklahoma State University** 2017–2019  
*Advisor: Christopher Fennell*

## PUBLICATIONS

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- [1] K. K. Boddy, B. Dutta, A. J. Evans, W.-C. Huang, S. Moltner, and L. E. Strigari, “Indirect detection of dark matter absorption in the Galactic Center”, *arXiv e-prints*, arXiv:2404.17418, arXiv:2404.17418, Apr. 2024. arXiv: 2404.17418 [hep-ph].
- [2] E. Vienneau, A. J. Evans, O. V. Hartl, N. Bozorgnia, L. E. Strigari, A. H. Riley, and N. Shipp, “Significant impact of Galactic dark matter particles on annihilation signals from Sagittarius analogues”, *JCAP*, vol. 2024, no. 10, 019, p. 019, Oct. 2024. arXiv: 2403.15544 [astro-ph.HE].
- [3] A. J. Evans, L. E. Strigari, O. Svenborn, A. Albert, J. P. Harding, D. Hooper, T. Linden, and A. B. Pace, “On the gamma-ray emission from the core of the Sagittarius dwarf galaxy”, *MNRAS*, vol. 524, no. 3, pp. 4574–4585, Sep. 2023. arXiv: 2212.08194 [astro-ph.HE].
- [4] A. J. Evans, L. E. Strigari, and P. Zivick, “Dark and luminous mass components of Omega Centauri from stellar kinematics”, *MNRAS*, vol. 511, no. 3, pp. 4251–4264, Apr. 2022. arXiv: 2109.10998 [astro-ph.GA].

## PROPOSALS AND GRANTS

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- **Fermi Guest Investigator Proposal Cycle 15:** Searching for inverse Compton emission from globular clusters with Fermi-LAT and HAWC, \$70k [SCIENCE PI]
- **Hubble Space Telescope Proposal Cycle 30:** Creating a Standardized Sample of Milky Way Satellite Galaxy Binary Fraction Measurements , \$60k [CO I]

## SCHOLARSHIPS AND AWARDS

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• DOE Office of Science Graduate Student Research (SCGSR) program	Summer 2022
• Dr. Chia-Lia Wang Memorial Scholarship, [for travel] 750 dollars	Spring 2022, Spring 2023, Fall 2024
• National Science Foundation travel grant, 500 dollars	Spring 2022
• Texas A&M Physics & Astronomy Department Travel Grant, 500 dollars	Spring 2022
• Texas Space Grant Consortium Graduate Fellowship,	2020–2022
• Society of Physics Notable Chapter Award <i>as Secretary</i>	2018–2019
• Paul A. Westhaus Physics Scholarship	2017–2019
• Friends of the Observatory Scholarship	2017–2018
• Academic Excellence Scholarship	2015–2019

## CONFERENCES & PRESENTATIONS

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• HAWC Collaboration Meeting, Mexico City, MX “ <i>The Case for Terzan 5</i> ”	April 2024
• Naval Research Laboratory “ <i>On the gamma-ray emission of the Sagittarius dwarf galaxy</i> ”	October 2023
• Texas Astroparticle and Cosmology Symposium “ <i>On the gamma-ray emission of the Sagittarius dwarf galaxy</i> ”	October 2023
• TeVPA 2023, Naples, Italy “ <i>On the gamma-ray emission of the Sagittarius dwarf galaxy</i> ”	October 2023
• Stockholm University AstroParticle Seminar “ <i>The gamma-ray emission of dwarf galaxies and globular clusters</i> ”	September 2023
• University of Hawai’i Cosmology Seminar “ <i>The gamma-ray emission of dwarf galaxies and globular clusters</i> ”	March 2023
• Nuclear Astro Seminar “ <i>On the gamma-ray emission from the core of the Sagittarius dwarf galaxy</i> ”	February 2023
• Fermi Symposium, South Africa “ <i>The gamma-ray emission of dwarf galaxies and globular clusters</i> ”	October 2022
• University of New Mexico NUPAC Seminar “ <i>The gamma-ray emission of globular clusters and its connection to dark matter</i> ”	August 2022
• Los Alamos National Lab Astro Seminar “ <i>The gamma-ray emission of globular clusters and its connection to dark matter</i> ”	August 2022
• Texas A&M Astrosymposium “ <i>The gamma-ray emission of globular clusters</i> ”	August 2022
• Fermi Summer School “ <i>The gamma-ray emission of globular clusters with Fermi-LAT and HAWC</i> ”	June 2022
• Aspen Center for Physics “ <i>Dark and luminous mass components of Omega Centauri</i> ”	March 2022
• Astronomy on Tap B/CS: “ <i>Prospects for Detection of Space Vampires</i> ” [outreach]	November 2021
• Master’s defense + prelim talk: “ <i>Dark matter, millisecond pulsars, and globular clusters</i> ”	October 2021
• Texas A&M Astrosymposium: “ <i>Omega Centauri is a tidally stripped dwarf galaxy: Change My Mind</i> ”	August 2021
• APS Texas Section: “ <i>Searching for dark matter in Omega-Centauri using stellar kinematics</i> ”	November 2020 (virtual)
• Texas A&M Astrosymposium: “ <i>Searching for dark matter in Omega-Centauri</i> ”	August 2020 (virtual)
• Astronomy on Tap B/CS: “ <i>A Non-Western History of Astronomy: Astronomy of the Islamic World</i> ” [outreach]	February 2020
• Conference for Undergraduate Women in Physics (CUWiP): <i>Panelist</i>	January 2020
• Texas A&M Astrosymposium: “ <i>Modeling Water Using Spherical Harmonic Interactions</i> ”	August 2019
• Graduate School Applications Workshop: <i>Q&amp;A</i>	June 2019
• Senior Thesis Presentation: “ <i>Oklahoma State’s Next Top Water Model(s)</i> ”	May 2019
• ACS Pentasectional Meeting: “ <i>Modeling Water Using Spherical Harmonic Interactions</i> ” (poster)	April 2019
• CUWiP: “ <i>Probing a Mixed Dark Matter Scenario with the CLASS Code</i> ” (poster)	January 2019
• REU Physics Symposium: “ <i>Probing a Mixed Dark Matter Scenario with the CLASS Code</i> ”	August 2018
• CUWiP: “ <i>Simulation of Solvated Ions Using Radial Probability Distribution Functions</i> ” (poster)	January 2018

## TEACHING AND MENTORING

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- Graduate Radiative Transfer, **Grader** Fall 2021
- Physics II (E&M), **Lab instructor** Fall 2020
- Warrior Scholar Project: STEM Week, **Project leader** Summers 2020, 2021, 2022
- Introduction to Astronomy, **Lab instructor** Spring 2020, Spring 2021
- Stars and Extrasolar Planets, **Grader** Fall 2019
- Physics II (E&M), **Lab instructor** Spring 2018 –Summer 2019
- Physics, chemistry, and calculus, **University private tutor** Fall 2017
- Chemistry for Engineers, **Supplemental Instruction leader** Fall 2016 –Spring 2017

## OUTREACH AND SERVICE

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- TAMU Astronomy Department, **Graduate student representative** Fall 2022 –Spring 2023  
*Attend monthly faculty meetings and represent graduate student interests*
- Gateway To Graduate School, **Co-founder and organizer** Summer 2022 –Fall 2022  
*Open house for undergraduates from historically-excluded backgrounds in astronomy*
- TAMU Physics and Engineering Festival, **Volunteer** Spring 2022  
*Ran booth during event to teach children about their weight on different planets.*
- Astronomy on Tap B/CS, **Emcee** Fall 2021 –Present  
*Emcee monthly Astronomy on Tap events.*
- Mentoring & Advising Graduates in an Inclusive Community (MAGIC), **Coordinator** Fall 2021 –Spring 2023  
*Pair first year graduate students with mentors. Hold monthly meetings to discuss topics such as choosing an advisor and managing time.*
- Mentoring & Advising Graduates in an Inclusive Community (MAGIC), **Mentor** Fall 2020 –Spring 2023  
*Meet monthly with first year graduate student, foster a safe and kind environment in the department.*
- Warrior Scholar Project: STEM Week, **Project leader** Summers 2020, 2021, 2022  
*Worked with veterans and active duty military workers to complete an astronomy project of my own design.*
- Conference for Undergraduate Women in Physics, **Volunteer** January 2020  
*Oversaw conference operations during the event alongside the organizers and other volunteers.*
- Grandparents University, **Volunteer** Summer 2019  
*Oversaw elementary school students working with molecular chemistry models.*
- Society of Physics Students Annual Spooky Laboratory Night, **Founder and organizer** Fall 2018  
*Created and organized the event. Oversaw operations at the time of the event.*
- Oklahoma State Star Parties, **Volunteer** Spring 2018 –Fall 2018  
*Oversaw operations at the time of the event.*

## PROGRAMMING

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- **Fluent in:** Python, LaTeX, R
- **Experience with:** C, C++, html, Javascript, CSS, git, vim