

LINDSAY R. HOUSE

<https://lindsay.house> • lindsay.house@utexas.edu

ORCID: 0000-0002-1496-6514

UT Austin, Department of Astronomy • PMA 16.216 • 2515 Speedway Blvd Austin, TX 78712

EDUCATION

Ph.D in Astronomy • University of Texas (UT) Austin	Aug 2020–Present
• Dual Concentration in Teaching & Mentoring and Science Public Policy	
• Advisor(s): Karl Gebhardt and Keely Finkelstein	
B.S. in Physics • University of North Carolina (UNC) Greensboro	Aug 2018–Dec 2019
• Advisor(s): Ian Beatty and Alicia Aarnio	
B.A. in Applied Mathematics in Biochemistry • UNC Asheville	Aug 2012–May 2016
• Highest Distinction in Mathematics	

PROFESSIONAL APPOINTMENTS

NSF Graduate Research Fellow	University of Texas Austin	Aug 2022 –Present
Graduate Research Assistant	University of Texas Austin	Aug 2020 – Present
Research Assistant	University of Colorado Boulder & Fiske Planetarium	Summer 2020
Adjunct Instructor	Wake Tech Community College, Raleigh, NC	Dec 2019 – Jan 2021
NSF REU Research Student	University of Colorado Boulder - JILA	Summer 2019
Undergraduate Research Student	UNC Greensboro	Aug 2018 – Dec 2019
Planetarium Presenter	Morehead Planetarium, Chapel Hill, NC	Mar 2018–Jul 2019
High School (HS) Math Teacher	Leesville Rd. High School, Raleigh, NC	Feb 2018–Jun 2018
HS Summer Camp Asst. Director	UNC Chapel Hill	Summer 2018
Undergraduate Research Student	UNC Asheville	Aug 2014 – May 2016

GRANTS, AWARDS, & HONORS

NASA Citizen Science Seed Funding Grant (Co-I)	\$160,009	Aug 2022 – Present
NSF Graduate Research Fellow	\$147,000	Aug 2022–Present
Scholar for Informal Science Education Association of Texas		Mar 2022
Undergraduate Astro Research and Creativity Award	UNC Greensboro	Jan 2019 – Dec 2019
Sigma Pi Sigma National Physics Honors	UNC Greensboro	Aug 2018 – Dec 2019
American Astronomical Society Ambassador	AAS	Dec 2017 - Present
Highest Distinction in Mathematics	UNC Asheville	May 2016

PUBLICATIONS

1. **Lindsay R. House *et al* 2023** • The Astrophysical Journal • *Using Dark Energy Explorers and Machine Learning to Enhance the Hobby-Eberly Telescope Dark Energy Experiment (HETDEX)*
2. **E.M. Cooper *et al* 2023** • ApJ 943 177 • *HETDEX Public Source Catalog 1: 220 K Sources Including Over 50 K Ly α Emitters from an Untargeted Wide-area Spectroscopic Survey*
3. **Dustin Davis *et al* 2023** • ApJ • *The HETDEX Survey: Emission Line Exploration and Source Classification*
4. **Chenxu Liu *et al* 2022** • ApJ 940 40 • *The Active Galactic Nuclei in the HETDEX. III. A Red Quasar with Extremely High Equivalent Widths Showing Powerful Outflows*
5. **Chenxu Liu *et al* 2022** • ApJ 935 132 • *The Active Galactic Nuclei in the HETDEX. II. Luminosity Function*

6. **Chenxu Liu *et al* 2022** • ApJ 261 24 • *The Active Galactic Nuclei in the HETDEX. I. Sample Selection*
7. **Karl Gebhardt *et al* 2021** • ApJ 923 217 • *The Hobby–Eberly Telescope Dark Energy Experiment (HETDEX) Survey Design, Reductions, and Detections*

MENTORSHIP

- Undergraduate Research Mentor:** Jose Saucedo, Mike Troung, & Isaiah Pipkin 2022- Present
 • Mentored undergraduates for the Dark Energy Explorers project. Held and led weekly group meetings and research projects for undergraduates who have presented posters at multiple conferences.
- NSF REU Informal Mentor:** Hera Weigand (now current UT Austin grad student) Summer 2021
 • Mentored an undergraduate weekly for the summer guided them in their research project, ensured they had the resources to apply for grad school, and integrated them to the department.
- UT Austin GUMMY Informal Mentor:** Abriana Joy Himantog & Delaney White 2020 - Present
 • Mentored undergraduates through their time at UT Austin. Advised them on courses and research, while providing them resources for being successful in astronomy.

TEACHING

Courses:

- AST 301, Guest Lecturer** UT Austin Fall 2022
 A 200-student introductory astronomy course
- Science Sprints, Co-Founder** UT Austin Aug 2020 – Present
 Developed a hack-a-thon style event for 400+ undergraduates as a part of Dark Energy Explorers
- MAT 171, Instructor** Wake Tech Community College Spring 2020, Fall 2020, Spring 2021
 A 30-student pre-calculus algebra course
- MAT 071, Instructor** Wake Tech Community College Spring 2020, Fall 2020, Spring 2021
 A 15-student supplemental course to help build academic habits & foster a growth-mindset in math
- AST 235, Teaching Assistant** UNC Greensboro Spring 2019, Fall 2019
 A 150-student introductory astronomy course
- BIO 328, Teaching Assistant** UNC Asheville Fall 2014
 A 40-student human anatomy lab

SELECTED ACADEMIC PRESENTATIONS

- Invited Speaker:** Machine Learning/AI Panel at CitSci Conference May 2023
- Invited Talk:** McDonald Observatory Apr 2023
- Invited Talk:** American Physical Society JUNIPER Program Dec 2022
- Invited Talk:** University of Colorado Boulder Nov 2022
- Invited Talk:** UT Austin NSF GRFP Workshop Sep 2022
- Invited Talk:** UT Austin Board of Visitors Meeting Oct 2021
- Invited Talk:** McDonald Observatory Teachers Workshop July 2021
- Contributed Talk:** CitSci Conference May 2023
- Contributed Talk:** UT Austin Extragalactic Seminar Mar 2021, April 2022 & Feb 2023
- Contributed Talk:** American Astronomical Society 234 Jan 2023
- Contributed Talk:** Informal Science Education Association Conference Feb 2022

STUDENT & PROFESSIONAL LEADERSHIP

Graduate Student Rep.	UT Austin Astronomy Department	Fall 2022 – Present
* Serve as grad student liaison, attend faculty meetings, host town halls, serve on graduate admissions committee		
Executive Committee	American Physical Society Forum on Outreach & EP	Fall 2022 – Present
Judge	Capital of Texas Undergraduate Research Forum	Spring 2021

PRESS & SCIENCE WRITING FOR DARK ENERGY EXPLORERS

- * [Scripps News Nationwide](#) (60+ stations)
- * [CBS News](#)
- * [AAS Education Blog](#)
- * [National Public Radio \(NPR\)](#)
- * [NBC News](#)
- * [StarDate Magazine](#)

PERSONAL WEBSITE



DARK ENERGY EXPLORERS (AT A GLANCE)



DARK ENERGY EXPLORERS (APP DOWNLOAD)



GRADUATE COURSE WORK

Course	Title	Grade
AST 386C	PROPERTIES OF GALAXIES	A
AST 393F	SURVEY OF INTERSTELLAR MEDIUM	A
AST 381	FORMATION GALAXY & LARGE-SCALE STRUCTURE	A
EDC 380R	EDUCATIONAL RESEARCH & DESIGN	A
AST 382C	ASTROPHYSICAL GAS DYNAMICS	A
AST 380E	RADIATIVE PROCESSES & RADIATIVE TRANSFER	A
AST 396C	ELEMENTS OF COSMOLOGY	A-
AST 382D	ASTRONOMICAL DATA ANALYSIS	A
AST 392D	MATH METHODS IN ASTROPHYSICS	A