

Andrew W. Mann

Curriculum Vitae and Publication List

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PERSONAL & CONTACT INFORMATION	UNC Chapel Hill Department of Physics & Astronomy 271 Phillips Hall, Office 242 Chapel Hill, NC 27599	<i>E-mail:</i> awmann@unc.edu <i>Github:</i> https://github.com/awmann <i>Homepage:</i> http://andrewwmann.com <i>Office:</i> (919) 442-8934
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EDUCATION **Institute for Astronomy, University of Hawai‘i at Mānoa,**
Ph.D., Astronomy & Astrophysics, August 2013
PhD Thesis Topic: *Planets around cool stars: a spectroscopic and photometric study of M dwarfs and their planets*
Advisor: Prof. Eric Gaidos

M.S., Astronomy, 2010
Masters Thesis Topic: *BHOMs and the Redshift Evolution of the Cluster Merger Fraction*; Advisor: Dr. Harald Ebeling

Department of Physics and Astronomy, Johns Hopkins University,
B.S., Physics, Mathematics minor, June 2008

PROFESSIONAL EXPERIENCE	Associate Professor, UNC Chapel Hill	2024 – Present
	Assistant Professor, UNC Chapel Hill	2018 – 2024
	<i>Hubble</i> Postdoctoral Fellow, Columbia University	2017 – 2018
	<i>Hubble</i> Postdoctoral Fellow, UT Austin	2015 – 2017
	Visiting Scientist, Boston University	2013 – 2014
	<i>Harlan J. Smith</i> Postdoctoral Fellow, UT Austin	2013 – 2015

HONORS **Team**
Pa Chia Thao:
ExoExplorer 2023
Amelia Earhart Fellowship 2022
NSF Graduate Fellowship 2019-2023
Jack Kent Cooke Foundation Graduate Fellowship 2019-2022
Flatiron Predoctoral Fellowship 2021
Keck Visiting Scholar 2020

Mackenna Wood:
Three-minute thesis (3MT) winner 2022
NSF Graduate Fellowship, Honorable Mention 2020

Madyson Barber:
NSF Graduate Fellowship 2023
Robert Shelton Award for Outstanding Research 2022

CSS Science Scholar	2021
Andrew Boyle:	
NSF Graduate Fellowship	2024
<u>Personal</u>	
Scialog (Research Corporation for Science Advancement) Fellow	2019
Hubble Prize Fellowship	2015
Harlan J. Smith Prize Fellowship	2013
Advancing Science in America Award (ARCS)	2011

PUBLICATIONS ADS citations statistics as of November, 2024:
 & 250 peer-reviewed publications, 21 first-author, and 10 led by UNC students.
 SCHOLARSHIP 13,000 total citations, with an H-index of 61.
 Full listing of papers on [Google Scholar](#)

Invited Talks and Colloquia

(Colloquium) University of Michigan	2024
(Colloquium) Johns Hopkins University	2023
(Colloquium) Hertzberg Astrophysics	2021
(Invited) <i>TESS</i> Science Team Meeting	2021
(Invited) Sagan Summer Workshop (speaker and panelist)	2021
(Invited) THYME conference I	2020
(Invited) <i>TESS</i> Science Team Meeting	2020
(Invited) UC Irvine Virtual Astronomy Series	2020
(Invited) Kepler & K2 Science Conference V	2019
(Colloquium) University of Hawaii at Manoa; Institute for Astronomy	2018
(Invited) IRTF Future Directions	2018
(Colloquium) UNC-Chapel Hill; Department of Physics and Astronomy	2018
(Colloquium) Michigan State University; Department of Astronomy	2018
(Colloquium) Ohio State University; Department of Astronomy	2018
(Colloquium) University of Florida; Department of Astronomy	2018
(Invited) Frank N. Bash Symposium; New Horizons in Astronomy	2017
(Invited) Asteroseismology and Optical Interferometry	2017
(Colloquium) University of Florida; Department of Astronomy	2017
(Colloquium) Academia Sinica; Institute of Astronomy and Astrophysics	2017
(Colloquium) University of Minnesota; Institute for Astrophysics	2017
(Colloquium) Institute of Astronomy, National Tsing Hua University	2016
(Invited) California Institute for Technology (Distinguished Visitor)	2013

TEACHING ACTIVITIES

Courses Taught

Spring 2025: ASTR 100	250 students
Fall 2024: ASTR 519 & ASTR 719	23 students
Spring 2024: ASTR 511 & ASTR 711	5 students
Fall 2023: ASTR 519	25 students

Spring 2022: ASTR 101	203 students
Fall 2021: ASTR 519 & ASTR 719	11 students
Spring 2021: ASTR 101	173 students
Fall 2020: ASTR 202	34 students
Spring 2020: ASTR 519 & ASTR 719	19 students
Fall 2019: ASTR 202	17 students
Spring 2019: ASTR 519 & ASTR 719	10 students

Graduate Students Supervised

Andrew Boyle (1st year, former UNC undergraduate);
 Project Topic: *Gyro-Tagging young stars with TESS*
 Madysen Barber (2nd year, former UNC undergraduate);
 Project Topic: *The search for young planets with TESS*
 Reilly Millburn (5th year);
 Project Topic: *Photoevaporation and exospheres of young transiting planets*
 Matthew Fields (5th year);
 Project Topic: *Are planets born aligned with their host stars?*
 Pa Chia Thao (5th year);
 Project Topic: *Atmospheres of young exoplanets*
 Jonathan Bush (Graduated with Masters in 2023);
 Project Topic: *Gyro-Tagging young stars with TESS*
 Mackenna Wood (Graduated with Ph.D. in 2023);
 PhD topic: *Ages of young stellar associations*

Current & Recent Undergraduate Students

William Storch; (Sophomore);
 Project Topic: *Masses of planets from their atmospheres*
 Leah Boff; (Sophomore);
 Project Topic: *Finding False False-Positive Planets*
 Isabel Lopez Murillo; (Junior);
 Project Topic: *Transit Timing Variations in Young systems*
 Salem Burtner; (Senior);
 Project Topic: *Galactic Strings, separating reality from artifacts*
 Madysen Barber; (graduated 2022, Undergraduate Thesis);
 Project Topic: *A new young association in the Kepler field*
 Stephen Schmidt; (graduated 2022, Undergraduate Thesis);
 Project Topic: *M dwarf metallicities from wide binaries*
 Bowen Gu; (graduated 2022);
 Project Topic: *The role of activity on late-type dwarf stars*
 Dylan Owens; (graduated 2021);
 Project Topic: *Eccentricities of young planets*
 Patrick Gorman; (graduated 2020);
 Project Topic: *Design of a 1U CubeSat*
 SJ Espinosa; (graduated 2019);
 Project Topic: *Wide Binaries in Gaia*

High School Students

Mackenzie Savage (NCSSM);	
Project Topic: <i>Basic CubeSat Design</i>	2020
Ayesha Darekar (Apex High School);	
Project Topic: <i>TESS and Gaia contamination</i>	2020

EXTERNAL GRANTS & AWARDS

Total funding to UNC: \$2.6M	
<i>Measuring the Mass of Young Planetary Systems Using Transit Timing Variations</i> - NASA TESS Guest Investigator Cycle 7.	May 2025 – May 2027
<i>The TESS Sco-Cen Legacy Survey</i> - TESS Guest Investigator Cycle 7.	Jan 2025 – Jan 2027
<i>Exploring the properties spots on young stars</i> - TESS Guest Investigator Cycle 7.	Jan 2025 – Jan 2027
<i>Demographics of Young Planets with TESS</i> - NASA Exoplanet Research Program (XRP)	Jan 2025 – Jan 2028
<i>Accretion onto a 3Myr transiting planet</i> - NASA/JPL Keck PI Data award.	July 2024 – June 2025
<i>Measuring the Mass of Young Planetary Systems Using Transit Timing Variations</i> - NASA TESS Guest Investigator Cycle 6.	May 2024 – Apr 2026
<i>The Search for Additional Planets in Known Young Planetary Systems</i> - TESS Guest Investigator Cycle 6.	Apr 2024 – Mar 2026
<i>Gyro-Tagging: Identifying Members of Young Associations from Their Light Curves</i> - NASA Astrophysics Data Analysis Program.	Apr 2024 – Mar 2026
<i>TESS Reaches for Cooler Planets</i> NASA TESS - Guest Investigator Cycle 5.	Feb 2022 – Jan 2024
<i>The Atmosphere of a 17 Myr Hot Jupiter</i> - NASA JWST Cycle 1 GO.	Feb 2022 – Jan 2024
<i>CAREER: Fundamental Properties of Young and Pre-MS Stars</i> - NSF CAREER	Apr 2022 – Mar 2027
<i>How often are newborn planets aligned with their host stars?</i> - NASA Exoplanet Research Program (XRP).	Jul 2021 – Jun 2023
<i>A giant planet transiting a cool white dwarf</i> - NASA/JPL Keck PI Data award.	Jun 2020 – Jun 2022
<i>The search for young planets using Cycle 1 and Cycle 3 TESS data</i> - NASA TESS Guest Investigator Cycle 3.	Nov 2020 – Nov 2022
<i>Dancing Degenerates: Ages of Brown Dwarfs from White Dwarfs</i> - Heising-Simons Foundation (Scialog TDA).	Oct 2019 – Oct 2021

<i>Zodiacal Exoplanets in Time: Spitzer's view of two young exoplanets</i> - NASA Astrophysics Data Analysis Program (ADAP).	May 2019 – May 2021
<i>Zodiacal Exoplanets in Time: The search for long-period planets and eclipsing binaries in Praesepe</i> - NASA K2 Guest Observer.	Oct 2018 – Oct 2020
<i>Studying Young Planets with TESS</i> - WIYN/Exoplanet PI Data award	Aug 2018 – July 2020
<i>The Mass-Luminosity-Age Relation of M dwarfs</i> - NASA/JPL Keck PI Data award	July 2018 – July 2020

PROFESSIONAL **UNC Committees & Service**

SERVICE &	Graduate Admissions & Recruiting	2018, 2019, 2020
OUTREACH	Society of Physics Students Advisor	2019, 2020, 2021, 2022
	Colloquia Committee	2019, 2020, 2021
	SALT Board of Directors	2020
	Faculty Council (Natural Sciences and Mathematics); Alternate	2020

External Professional Service

Referee for Nature, the Astrophysical Journal (ApJ), the Astronomical Journal (AJ), Monthly Notices of the Royal Astronomical Society (MNRAS), Astronomy and Astrophysics (A&A), and Publications of the Astronomical Society of the Pacific (PASP).

Pandora Science Contributor	2022–present
ESPEX Science Team	2022–present
NASA MIDEX reviewer	
ESA's <i>PLATO</i> Target Selection Group	2020–present
NASA IRTF SPECTRE Science Advisory Committee	2019–present
Co-PI THYME Collaboration	2018–present
NASA's <i>TESS</i> Target Selection Group	2015–present
NASA's <i>TESS</i> Follow-up Group (TFOP)	2015–present
Reviewer for <i>JWST</i> and <i>HST</i>	2015, 2023
PI ZEIT Collaboration	2015–present
Reviewer for Erwin Schroedinger Fellowship	2020
NASA (XRP) external grant reviewer	2018, 2019

Recent Public & Outreach Talks

Astronomy on Tap, Raleigh	2024
Symposium on Horizons in Astronomy and Physics Education (SHAPE)	Feb 2020
Astronomy on Tap, Durham	Nov 2018
Gasparilla Teachers Association	Jul 2018
Astronomy on Tap, Austin	Mar 2017

EXES Teacher Meeting

June 2017
