

Maurice Wilson

Harvard-Smithsonian Center for Astrophysics · 60 Garden St, MS-10 · Cambridge, MA 02138, USA

Education	Harvard University	
	Ph.D. in Astronomy	Expected: 2022
	M.A. in Astronomy	Achieved: 2018
	Embry-Riddle Aeronautical University (ERAU)	
	B.S. in Space Physics	Achieved: 2016
Research	Energy budget and extended heating of solar CMEs.	
Interests	High precision photometry and doppler spectroscopy pipelines. Exoplanet candidate detection and characterization.	
Appointments (Selected)	NSF Graduate Research Fellow	2016—Present
	Harvard University	
	Advisors: Jason Eastman & John Raymond	
	Teaching Assistant	Spring 2020
	Harvard University	
	Observational Astronomy semester course	
	Teaching Assistant	Fall 2019
Harvard University		
Intro to Astronomy semester course		
Banneker Institute Intern	Summer 2015	
Harvard-Smithsonian Center for Astrophysics		
Advisors: Jason Eastman & John Johnson		
SAO REU Summer Intern	Summer 2014	
Harvard-Smithsonian Center for Astrophysics		
Advisors: Hans Moritz Guenther & Katie Auchettl		
Undergraduate Research Assistant	2013—2016	
Embry-Riddle Aeronautical University		
Advisor: Edwin Mierkiewicz		
Honors & Awards	Honors Program of ERAU	
	Selected students, who show high academic achievement, take advanced level courses and receive funding for research projects.	
	Ronald E. McNair Scholars Program at ERAU	
	Selected students receive research advisors, a semiannual \$1,500 scholarship, and funding for conferences and research projects.	
	Jesse C. King Space Physics Scholarship at ERAU	
	Selected Space Physics student receives \$1,000 toward tuition.	

Rodger Doxsey Travel Prize of 239th AAS Meeting

Prize and travel funds for PhD dissertation abstract. Due to the pandemic, the Meeting and thus travel funds were cancelled for January 2022 although the prize was acknowledged.

Funding	Research Grant Provider	Year	Value
	NASA Heliophysics Division	2019-22	\$609,314
	My role: Collaborator; first-author on proposed work: “Constraining the CME Core Heating and Energy Budget with SOHO/UVCS”		
	SAO Scholarly Studies Awards	2018	\$63,479
	My role: Collaborator; first-author on proposed work: “Constraining the CME Core Heating and Energy Budget with SOHO/UVCS”		
	NSF GRFP Funds	2016-19	\$138,000
	My role: led research proposal; first-author on proposed work: “First radial velocity results with the MINIature Exoplanet Radial Velocity Array (MINERVA)”		
	ERAU Ignite Spark Grants	2015	\$2,000
	My role: led proposal for research travel grant; led research resulting in poster at AAS Meeting.		
	ERAU Honors Program	2015	\$1,200
	My role: research travel funds available to Honor Students; led research resulting in poster at AAS Meeting.		
	ERAU McNair Program	2015	\$4,000
	My role: research funding available to McNair Scholars; led research resulting in talk at McNair Conference.		
	ERAU Ignite Spark Grant	2014	\$1,000
	My role: led proposal for travel grant; gathered spectra from the McMath Pierce Solar telescope at Kitt Peak.		

Paper Publications

“Constraining the CME Core Heating and Energy Budget with SOHO/UVCS”

Wilson, M. L., Raymond, J. C., Lepri, S. T., et al. 2021, ArXiv: 2111.03178

“The HD 217107 Planetary System: Twenty Years of Radial Velocity Measurements”

Giovinazzi, M. R., Blake, C. H., et al. including **Wilson, M. L.**, 2020, AN, 341, 870

“A Full Implementation of Spectro-perfectionism for Precise Radial Velocity Exoplanet Detection: A Test Case With the MINERVA Reduction Pipeline”

- Cornachione, M. A., Bolton, A. S., Eastman, J. D., **Wilson, M. L.**, et al. 2019, PASP, 131, 1006
- “MINERVA-Australis. I. Design, Commissioning, and First Photometric Results”
Addison, B., Wright, D. J., et al. including **Wilson, M.**, 2019, PASP, 131, 1005
- “KELT-24b: A 5 M_J planet on the 5.6 day well-aligned orbit around the young $V=8.3$ F-star HD 93148”
Rodriguez, J. E., Eastman, J. D., et al. including **Wilson, M. L.**, 2019, AJ, 158, 197
- “First radial velocity results with the MINiature Exoplanet Radial Velocity Array (MINERVA)”
Wilson, M. L., Eastman, J. D., Cornachione, M. C., et al. 2019, PASP, 131, 1005
- “KELT-20b: A giant planet with a period of $P \sim 3.5$ days transiting the $V \sim 7.6$ Early A Star HD 185603”
Lund, M. B., Rodriguez, J. E., et al. including **Wilson, M.**, 2017, AJ, 154, 194

Invited Talks (Selected)

- Colloquium: Constraining the CME Core Heating and Energy Budget with SOHO/UVCS
NASA Goddard Space Flight Center (GSFC), virtual-only October 2021
- Colloquium: Constraining the CME Core Heating and Energy Budget with SOHO/UVCS
Naval Research Laboratory (NRL), virtual-only July 2021
- Colloquium: MINERVA’s Intrinsic Stability and First Radial Velocity Results
SAO REU Summer Series, virtual-only June 2020
- Talk: MINERVA’s First Radial Velocity Results
University of Chicago Exoplanet Journal Club, Chicago, IL April 2019

Community Service (Selected)

- Paper Referee: 1 A&A paper
- Communications and Transparency Subcommittee member of the APS-IDEA community
Harvard-Smithsonian CfA, Cambridge, MA June 2021—Present
- Graduate Mentor for the summer Latino Initiative program
Smithsonian Astrophysical Observatory (SAO), Cambridge, MA Summer 2020
- Instructor for public speaking course for the summer Banneker Institute program
Harvard University, Cambridge, MA Summer 2019
- Graduate Mentor for the summer Banneker Institute programs
Harvard University, Cambridge, MA 2016—2019
- Seasonal Volunteer: Space Visualization Lab speaker and (Doane) telescope operator
Adler Planetarium, Chicago, IL 2014—2019
- ERAU Campus Observatory Operator for astronomy class students’ projects
ERAU, Daytona Beach, FL 2014—2015