

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 of solar CMEs	
Interests	High precision photometry and Doppler spectroscopy pipelines	
	Exoplanet candidate detection and characterization	
Appointments (Selected)	Graduate Research Student	2016—Present
	Harvard University	
	Advisors: Jason Eastman & John Raymond	
	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	NSF Graduate Research Fellowship	
	The National Science Foundation's Graduate Research Fellowship	
	Program guarantees to fund 3 years of my graduate school expenses.	

Honors Program, Embry-Riddle Aeronautical University

Selected students, who show high academic achievement, take advanced level courses and receive priority and funding for research projects.

Ronald E. McNair Scholars Program at ERAU

Selected students who meet academic criteria and show potential for future doctorate degrees receive research advisors, a semiannual \$1,500 scholarship and funding for conferences and research projects.

Funding	<u>Research Grant Provider</u>	<u>Year</u>	<u>Value</u>
	NASA Heliophysics Division	2019-22	USD 609 314
	NSF GRFP	2016-19	USD 138 000
	ERAU Ignite Spark Grants	2015	USD 2 000
	ERAU Honors Program	2015	USD 1 200
	ERAU McNair Program	2015	USD 4 000
	ERAU Ignite Spark Grant	2014	USD 1 000

Paper Publications

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.** 4th author, et al. 2019, PASP, 131, 1006

MINERVA-Australis. I. Design, Commissioning, and First Photometric Results

Addison, B., Wright, D. J., Wittenmyer, R. A., et al. **Wilson, M.** 26th author, 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., Zhou, G., et al. **Wilson, M. L.** 32nd author, 2019, Arxiv:1906.03276

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., Zhou, G., et al. **Wilson, M.** 56th author, 2017, AJ,
154, 194

Talks and Posters (Selected)

- Talk: MINERVA's First Radial Velocity Results
University of Chicago Exoplanet Journal Club, Chicago, IL April 2019
- Talk: MINERVA's Intrinsic Stability and First Radial Velocity Results
Harvard-Smithsonian Exoplanet Pizza Lunch, Cambridge, MA April 2019
- Talk: MINERVA's First Radial Velocity Results
Boston Area Exoplanet Science Meeting, Cambridge, MA April 2019
- Talk: MINERVA's First Radial Velocity Results
Harvard Institute of Theory and Computation Luncheon, Cambridge, MA March 2019
- Talk: MINERVA's First Radial Velocity Results
233rd AAS Meeting, MINERVA Splinter Session, Seattle, WA January 2019
- Talk: Stability of the MINERVA Spectrograph's Instrumental Profile
231st AAS Meeting, Washington, D.C. January 2018
- Talk: First Year of MINERVA Operations
231st AAS Meeting, Washington, D.C. January 2018
- [Poster](#): MINERVA Telescope Control Software
EPRV Workshop, State College, PA August 2017
- [Poster](#): High Precision Photometry of Bright Transiting Exoplanets
Transiting Exoplanets Conference, Keele, England July 2017
- Talk: Simultaneous RVs and Photometry with MINERVA Control Software
229th AAS Meeting, Grapevine, TX January 2017
- [Poster](#): MINERVA High Precision Photometry
227th AAS Meeting, Kissimmee, FL January 2016
- [Poster](#): Finding X-ray Coronal Cycles in Low Mass Stars
225th AAS Meeting, Seattle, WA January 2015