

Joshua Lothringer

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Education	<i>Doctor of Philosophy</i> , Planetary Science University of Arizona, Tucson, AZ Advisor: Prof. Travis Barman	08/2014-2019 (Expected)
	<i>Bachelor of Arts</i> , Astronomy University of Colorado, Boulder CO Concentration: Astrophysics Minor: Philosophy	08/2010-12/2013
Research and Work Experience	Graduate Assistant Lunar and Planetary Laboratory, Tucson, AZ	08/2014-Present
	<ul style="list-style-type: none">• Research Assistant working with Dr. Ian Crossfield and Prof. Travis Barman on sub-Jovian transit spectroscopy with Hubble Space Telescope.	
	Undergraduate Research Assistant Laboratory for Atmospheric and Space Physics, Boulder, CO	10/2012-08/2014
	<ul style="list-style-type: none">• Developed data reduction procedures for the Imaging Ultra-Violet Spectrometer (IUVS) on the Mars Atmosphere and Volatile Mission (MAVEN).• Investigated efficient atmospheric model retrieval for rapid characterization of observations.	
	Command Controller Laboratory for Atmospheric and Space Physics, Boulder, CO	05/2012-08/2014
	<ul style="list-style-type: none">• Operated, planned, and analyzed telemetry for 6 NASA missions.<ul style="list-style-type: none">– Spacecraft: <i>Kepler</i>, SORCE, QuikSCAT, AIM– Instruments: Venetia Burney Student Dust Counter (SDC) on New Horizons, Hot Plasma Composition Analyzer (HPCA) on the Magnetospheric Multiscale Mission (MMS)• Led student teams for the Thermal and Photometer subsystems for <i>Kepler</i>.• Began development of the operations concept and training material for HPCA on MMS.	
Honors and Awards	Galileo Circle Scholar (\$1000)	2016
	1st Place - The Art of Planetary Science - Data Art Category	2015
	Graduate and Professional Student Council Travel Grant (\$250)	2015
	2015 Sagan Workshop Financial Aid (\$700)	2015
	Science Phoenix Award - SORCE Mission Operations	08/2014
	Dean's List	Spring 2012, Fall 2012, 2013
	Honors Residential Academic Programs	08/2010-05/2011
Valedictorian - Eaglecrest High School	2010	

Publications

1. Crossfield, I.J.M.; et al. "197 Candidates and 104 Validated Planets in K2's First Five Fields." *Astrophysical Journal Supplement* (Accepted).
2. Stevenson, K.B.; Lewis, N.K.; Bean, J.L.; Beichman, C.; Fraine, J; Kilpatrick, B.M.; Krick, J.E.; **Lothringer, J.D.** et al. "Transiting Exoplanet Studies and Community Targets for JWST's Early Release Science Program." *Publications of the Astronomical Society of the Pacific*, 128, 967.

Posters and Presentations

1. **Lothringer, J.D.**; et al. "Characterizing Four Sub-Jovian Exoplanets with HST/STIS." *Exoplanets I*. Davos, Switzerland. Jul. 2016. Poster Presentation.
2. **Lothringer, J.D.**; et al. "Determining the Atmospheric Nature of Super-Earth and Sub-Neptune Exoplanets." *American Astronomical Society Winter Meeting*. Orlando, FL. Jan. 2016. Poster Presentation.
3. **Lothringer, J.D.**; et al. "Determining the Atmospheric Nature of Super-Earth and Sub-Neptune Exoplanets." *Enabling Transiting Exoplanet Science with JWST*. Space Telescope Science Institute, Baltimore, MD. Nov. 2015. Poster Presentation.
4. **Lothringer, J.D.**; et al. "Determining the Atmospheric Nature of Super-Earth and Sub-Neptune Exoplanets." *Lunar and Planetary Laboratory Conference*. University of Arizona, Tucson, Arizona. Aug. 2015. Oral Presentation.
5. **Lothringer, J.D.**; et al. "Determining the Atmospheric Nature of Super-Earth and Sub-Neptune Exoplanets." *2015 Sagan Exoplanet Summer Workshop*. California Institute of Technology, Pasadena, California. Jul. 2015. Oral POP Presentation.
6. **Lothringer, J.D.**; et al. "Determining the Atmospheric Nature of Super-Earth and Sub-Neptune Exoplanets." *2015 Sagan Exoplanet Summer Workshop*. California Institute of Technology, Pasadena, California. Jul. 2015. Poster Presentation.
7. **Lothringer, J.D.**; et al. "Determining the Atmospheric Nature of Super-Earth Exoplanets." *Star and Planetary Formation in the Southwest*. Biosphere2, Tucson, Arizona. Mar. 2015. Poster Presentation.

Teaching, Service, and Other Experience

Visiting Student - Max Planck Institute for Astronomy, Germany	06-07/2016
Pima Community College GED Prep Math Tutor	2015-Present
Lunar and Planetary Laboratory Conference Organizing Committee	2015-Present
Lunar and Planetary Laboratory Outreach Program	2014-Present
NASA Review Panel Executive Secretary	
Graduate and Professional Student Council Travel Grant Judge	2015
Graduate Teaching Assistant and Guest Lecturer — PTYS 170B2	Fall 2014
MAVEN Outreach - Boulder, CO	2014
Grader for upper-division Extraterrestrial Life	Spring 2012

Observing Experience

Hubble Space Telescope - STIS and WFC3	124 orbits
<ul style="list-style-type: none"> • Transit spectroscopy of sub-Jovian exoplanets (13665, PI Benneke) • Eclipse observations of hot Jupiters (14797, PI Crossfield) 	
Large Binocular Telescope - LMIRCam	1 night
<ul style="list-style-type: none"> • K2 planet candidate follow-up (clouded out) 	
MMT - SWIRC and ARIES	6 nights
<ul style="list-style-type: none"> • SWIRC - Brown dwarf photometry • ARIES - High dispersion spectroscopy of Hot Jupiters 	

Sommers-Bausch Observatory - Optical CCD 7 nights
• Eclipsing binary light curves.

Affiliations

American Astronomical Society — Junior Member Since 2014
Phi Beta Kappa Member Since 2014
Planetary Society Member Since 2011