

Sarah Peacock

Curriculum Vitae

Lunar and Planetary Laboratory
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EDUCATION

2013- 2018 (Expected)	PhD candidate in Planetary Science, Lunar and Planetary Laboratory (LPL), University of Arizona Minor: Astrobiology
2016	M.Sc. in Planetary Science, University of Arizona
2013	B.A. in Astronomy-Physics, University of Virginia
2014	Astrobiology School at Biosphere2, part of Exoplanets, Biosignatures & Instruments Conference

RESEARCH EXPERIENCE

2013-present	Graduate Research Associate, LPL. Research on the early evolution of habitable zones around M dwarf stars. Advisor: Dr. Travis Barman
2011-2013	Research Assistant, University of Virginia. Research on probability and outcomes of Roche Lobe overflow from planets to stars. Advisor: Dr. Phil Arras
2012-2013	REU Intern, SETI Institute. Research on ice, dust, and extinction in the Perseus Molecular Cloud. Advisor: Dr. Jean Chiar

FELLOWSHIPS AND AWARDS

2016	Lloyd V. Berkner Space Policy Intern, Space Studies Board, National Academies of Sciences, Engineering, and Medicine
2015-2018	NASA Earth and Space Science Fellowship
2016	Galileo Circle Scholarship
2015	NSF Graduate Research Fellowship Honorable Mention
2015	Graduate Teaching Excellence Award
2013	Arizona Space Grant Graduate Fellowship

PEER REVIEWED PUBLICATIONS

Jackson, B., Jensen, E., **Peacock, S.**, Arras, P., Penev, K. 2016. Tidal Decay and Disruption of Short-Period Gaseous Exoplanets. *Celestial Mechanics, Vol. 126 pp.227-248.*

Shkolnik, E., Rolph, K., **Peacock, S.**, Barman, T. 2014. Predicting Ly α and Mg II Fluxes from K and M dwarfs using Galaxy Evolution Explorer Ultraviolet Photometry. *The Astrophysical Journal Letters*, Vol. 796.

CONFERENCE ABSTRACTS

PEACOCK, S., Barman, T., Shkolnik, E., 2016. The Extreme-UV Radiation Environment of M dwarf Planet Hosts. Exoclimes meeting, August 2016.

Poster Presentation

Shkolnik, E., Miles, B., Barman, T., **PEACOCK, S.**, 2015. The High-Energy Radiation Environment of Planets around Low-Mass Stars. ESS meeting #3, id.500.06

PEACOCK, S., Barman, T., Shkolnik, E., 2015. Understanding the Early Evolution of M dwarf Extreme Ultraviolet Radiation. DPS meeting #47, id.404.06.

Oral Presentation

Jackson, B., Arras, P., Jensen, E., **PEACOCK, S.**, Marchant, P., Penev, K., 2015. Tidal Decay and Disruption of Gaseous Exoplanets. DPS meeting #47, id.501.08

PEACOCK, S., Barman, T., Shkolnik, E., 2015. HAZMAT II: Modeling the Evolution of Extreme-UV Radiation from M Stars. Star and Planet Formation in the Southwest.

Oral Presentation

Jackson, B., Arras, P., **PEACOCK, S.**, Penev, K., 2015. Tidal Decay and Disruption of Gaseous Exoplanets. IAU General Assembly, Meeting #29, id.2258333

PEACOCK, S., Barman, T., Shkolnik, E., 2015. HAZMAT II: Modeling the Evolution of Extreme-UV Radiation from M Stars. AAS Meeting #225, id.138.26.

Poster Presentation

Jackson, B., Arras, P., **PEACOCK, S.**, Penev, K., 2015. Tidal Decay and Disruption of Gaseous Exoplanets. AAS Meeting #225, id.408.07

Shkolnik, E., Rolph, K., **PEACOCK, S.**, Barman, T. 2015. Predicting Lyman-alpha and Mg II Fluxes from Low-Mass Stars. AAS Meeting #225, id.229.01

Molaro, J., Keane, J., **PEACOCK, S.**, Tanquary, H., 2015. The Art Of Planetary Science: An Exhibition - Bringing Together The Art And Science Communities To Engage The Public. DPS meeting #46, id.202.07

PEACOCK, S., Barman, T., Shkolnik, E., 2014. HAZMAT II: Modeling the Evolution of Extreme-UV Radiation from M Stars. Exoplanets, Biosignatures & Instruments meeting id.P2.33.

Oral Presentation

Shkolnik, E., Barman, T., **PEACOCK, S.**, 2014. HAZMAT I: The Evolution of Far- and Near-UV Emission from Early M Stars. AAS Meeting #223, id.215.03

PEACOCK, S., Chiar, J., Boogert, A., Knez, C., Mundy, L., Pendleton, Y., Tielens, X., van Dishoeck, E., 2014. Ice, Dust, and Extinction in the Perseus Molecular Cloud. AAS Meeting #221, id.349.23.

Poster Presentation

MEMBERSHIP AND SERVICE

2015-present	LPL Representative to the Arizona Graduate & Professional Student Council
2014-present	Co-Organizer of the Art of Planetary Science Exhibit
2015-present	Coordinator for the Graduate Student Colloquium Series, LPL
2014-present	Coordinator for the Prospective Graduate Students, LPL
2014-present	Junior Member of the American Astronomical Society
2015	Co-Organizer of Bennuval: An Evening of Space, Art, and Music
2014-2015	LPL Liaison for the International Dark Skies Association
2011-2013	UVA Astronomy Department Representative

TEACHING

2014	Teaching Assistant, University of Arizona, PTYS206: "Our Golden Age of Planetary Exploration," Dr. Steve Kortenkamp
2014	Guest Lecturer, PTYS206, "Exoplanets"
2013	Teaching Assistant, University of Arizona, PTYS206: "Our Golden Age of Planetary Exploration," Dr. William Hubbard
2013	Guest Lecturer, PTYS206, "Methods of Exoplanet Detection"

PUBLIC OUTREACH

2015-present	Volunteer at the Tucson Festival of Books
2013-present	Volunteer at "Observe the Moon Night" hosted by U. of Arizona
2015	Volunteer at Catalina Foothills Astronomy Night
2014	Volunteer at the Arizona Science and Astronomy Expo
2011-2013	Member of "Dark Skies, Bright Kids" teaching astronomy to children ages 9-13 once per week at rural elementary schools