

Sarah Peacock

Curriculum Vitae

Lunar and Planetary Laboratory
Department of Planetary Sciences
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EDUCATION

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| 2013- 2019 (Expected) | PhD candidate in Planetary Sciences, Lunar and Planetary Laboratory (LPL), University of Arizona Minor: Astrobiology |
| 2016 | M.Sc. in Planetary Sciences, University of Arizona |
| 2013 | B.A. in Astronomy-Physics, University of Virginia |
| 2014 | Astrobiology School at Biosphere2, part of Exoplanets, Biosignatures & Instruments Conference |

EXPERIENCE

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| 2013-present | Graduate Research Associate, LPL. Research on the high energy radiation environments around M dwarf stars. Advisor: Dr. Travis Barman |
| 2016 | Lloyd V. Berkner Space Policy Intern, Space Studies Board, National Academy of Sciences, Engineering, and Medicine |
| 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

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| 2015-2018 | NASA Earth and Space Science Fellowship |
| 2016 | College of Science Galileo Circle Scholarship, University of Arizona |
| 2015 | NSF Graduate Research Fellowship Honorable Mention |
| 2015 | Graduate Teaching Excellence Award |
| 2013 | Arizona Space Grant Graduate Fellowship |

PEER REVIEWED PUBLICATIONS

- Martinez, A., Crossfield, I., Schlieder, J., Dressing, C., Obermeier, C., Livingston, J., Ciceri, S., **Peacock, S.**, Beichman, C., et al. 2017. Stellar and Planetary Parameters for K2's Late-type Dwarf Systems from C1 to C5. *The Astrophysical Journal*, Vol. 837.
- Jackson, B., Arras, P., Penev, K., **Peacock, S.**, Marchant, P. 2017. A New Model of Roche Lobe Overflow for Short-period Gaseous Planets and Binary Stars. *The Astrophysical Journal*, Vol. 835.
- Jackson, B., Jensen, E., **Peacock, S.**, Arras, P., Penev, K. 2016. Tidal Decay and Disruption of Short-Period Gaseous Exoplanets. *Celestial Mechanics*, Vol. 126.
- 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., 2018. How Extreme is TRAPPIST-1? A look into the planetary system's extreme-UV radiation environment. AAS Meeting #231, id.334.05
Oral Presentation
- PEACOCK, S.**, Barman, T., Shkolnik, E., 2016. The Extreme-UV Radiation Environment of M dwarf Planet Hosts. Exoclimates (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

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| 2014-present | Co-Organizer of the Art of Planetary Science Exhibit |
| 2015-present | Coordinator for the Graduate Student Colloquium Series, LPL |
| 2014-present | Junior Member of the American Astronomical Society |
| 2016 | Co-Organizer for the Searching for Life Across Space and Time Workshop |
| 2015-2017 | LPL Representative to the Arizona Graduate & Professional Student Council |
| 2014-2017 | Coordinator for the Prospective Graduate Students, LPL |
| 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

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| 2016 | Guest Lecturer, Arlington Science Focus School |
| 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

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| 2015-present | Volunteer at the Tucson Festival of Books |
| 2013-present | Volunteer at "Observe the Moon Night" hosted by University 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 |