



# Spencer Wallace

Graduate Student in Astronomy

[scw7@uw.edu](mailto:scw7@uw.edu)

[Link to My Website](#)

## EDUCATION

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### PhD Astronomy (in progress)

2015-present

*University of Washington*

Working with Thomas Quinn to simulate planetesimal accretion and protoplanetary disk thermodynamics and chemistry around pre-main sequence M dwarf stars

### BS Astronomy, Physics and Computer Science

2009-2014

*University of Arizona*

Worked with David Arnett to implement a model for turbulent entrainment in the 1D stellar evolution code MESA

## WORK EXPERIENCE

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### Writer

2018 - present

*Astrobites*

- Write and edit articles summarizing published astronomy papers and general advice for undergraduate and graduate students

### Public Program Specialist

2014-2015

*National Optical Astronomy Observatory, Tucson, AZ*

- Ran night time observing programs for the public at Kitt Peak National Observatory
- During the programs, we present a series of talks about the basics of astronomy, physics and our place in the universe. Guests are shown around the night sky using their naked eye, binoculars, and a 0.4m telescope

### Research Assistant

Summer 2013

*Department of Astronomy, University of Washington*

- Worked with Andrew Connolly to predict the feasibility of using galaxy catalogs constructed by the Large Synoptic Survey Telescope to construct a map of dust extinction in the Milky Way

### Software Consultant

2011-2014

*LSST Corporation, University of Washington*

- Helped to develop a set of web based data visualization tools ([ASCOT](#)) for astronomers under the supervision of Andrew Connolly
- Developed new modules for the existing framework and held regular teleconference meetings with the other members of the project to test and debug the code

### Telescope Operator

2010-2014

*Steward Observatory, Tucson, AZ*

- Worked under the supervision of Dr. Elizabeth Green to collect and analyze asteroseismic data of hot subdwarf stars using the 61" Kuiper telescope on Mt. Bigelow

## TEACHING AND MENTORING

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<b>ASTR101 - Introductory Astronomy</b> <i>Teaching Assistant - University of Washington</i>	Fall 2015
<b>ASTR150 - Planetary Astronomy</b> <i>Teaching Assistant - University of Washington</i>	Winter 2016
<b>ASTR150 - Planetary Astronomy</b> <i>Teaching Assistant - University of Washington</i>	Spring 2016
<b>ASTR101 - Introductory Astronomy</b> <i>Teaching Assistant - University of Washington</i>	Summer 2016
<b>ASTR102 - Introduction to Astronomy</b> <i>Teaching Assistant - University of Washington</i>	Fall 2016
<b>ASTR101 - Introductory Astronomy</b> <i>Teaching Assistant - University of Washington</i>	Spring 2017
<b>ASTR192 - Pre-Major in Astronomy Research Seminar</b> <i>Research Mentor - University of Washington</i>	Fall 2018

## PUBLICATIONS AND POSTERS

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1. Wallace, S. and Quinn, T., “[N-body simulations of terrestrial planet growth with resonant dynamical friction](#)”, *arXiv:1810.07201* (2018). (In review)
2. Wallace, S. and Quinn, T., “[The influence of dynamical friction and mean motion resonances on terrestrial planet growth](#)”, *American Astronomical Society Division of Dynamical Astronomy Meeting 49*, 12 (2018).
3. Johnson, C., Green, E., Wallace, S., O’Malley, C., Amaya, H., Biddle, L., Fontaine, G., “[Photometric Survey to Search for Field sdO Pulsators](#)”, *arXiv:1308.1373* (2014).
4. Wallace, S. and Connolly, A. J., “[Spatial Variation of Deep Galaxy Number Counts: A Method Of Constraining Extinction With LSST](#)”, *American Astronomical Society AAS Meeting 223*, 254.38 (2014).
5. Marcos, D., Connolly, A. J., Krughoff, K. S., Smith, I., Wallace, S., “[ASCOT: A Collaborative Platform for the Virtual Observatory](#)”, *ASP Conference Series Vol. 461*, p.901 (2011).

## AWARDS

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<b>Wildcat Excellence Tuition Award</b> <i>University of Arizona</i>	2009 - 2014
<b><a href="#">Arizona Assurance Grant</a></b> <i>University of Arizona</i>	2009 - 2013
<b><a href="#">Galileo Circle Scholarship</a></b> <i>College of Science, University of Arizona</i>	Spring 2013
<b>Glenn Purviance Memorial Astronomy Scholarship</b> <i>Department of Astronomy, University of Arizona</i>	Fall 2013