Patrick Colin Tamburo

Boston University 725 Commonwealth Ave. Boston, MA 02215 tamburop@bu.edu patricktamburo.github.io Updated January 26, 2021

EDUCATION

SEP 2017-PRESENT | Graduat

Graduate Student in Astronomy

 $Boston\ University$

Adviser: Philip Muirhead

May 2019

Master of Arts in Astronomy

 $Boston\ University$

May 2016

Bachelors of Science in Astronomy and Physics

University of Maryland, College Park

Adviser: Drake Deming

Research Appointments

SEP 2018 - DEC 2020

Research Fellow

Boston University, Profs. Philip Muirhead & Paul Withers

SEP 2017 - SEP 2018

Dean's Fellow

Boston University, Prof. Philip Muirhead

Jul 2016 - Jul 2017

Research Assistant

NASA Goddard Spaceflight Center, Dr. Avi Mandell

Jan 2015 - Jul 2016

Undergraduate Student Researcher

University of Maryland, College Park, Prof. Drake Deming

Jun 2015 - Aug 2015

Undergraduate Research Intern

NASA Goddard Spaceflight Center, Dr. Avi Mandell

TEACHING APPOINTMENTS

Teaching Fellow Boston University

AS105: Alien Worlds, Spring 2021.

Teaching Assistant University of Maryland

ASTR340: Origins of the Universe, Spring 2016.

ASTR398b: Special Topics in Astro. - Black Holes, Fall 2015.

ASTR330: The Solar System, Spring 2015.

ASTR310: Observational Astronomy, Fall 2014.

Honors and Awards

SEP 2017 - Aug 2018 | Dean's Fellowship, Boston University

MAY 2016 | High Honors in Astronomy, University of Maryland

Jun 2015 - Aug 2015 | Summer Scholars Research Grant, University of Maryland

SEP 2014 - MAY 2016 | Maryland Space Grant Consortium Scholarship, Maryland Space

Grant

SEP 2012 - MAY 2014 | Dean's Scholarship, University of Maryland

Publications

As first author, refereed

- [1] **P. Tamburo** & P. Muirhead. "Design Considerations for a Ground-Based Search for Transiting Planets around L and T Dwarfs". *PASP*, 131, 1005, Oct 2019.
- [2] **P. Tamburo**, A. Mandell, D. Deming, & E. Garhart. "Confirming Variability in the Secondary Eclipse Depth of the Super Earth 55 Cancri E". AJ, 155, 5, May 2018.

As coauthor, refereed

- [3] K. D. Colón, L. Kreidberg, M. Line, L. Welbanks, N. Madhusudhan, T. Beatty, P. Tamburo, K. B. Stevenson, A. Mandell, J. E. Rodriguez, T. Barclay, E. D. Lopez, K. G. Stassun, D. Angerhausen, J. J. Fortney, D. J. James, J. Pepper, J. P. Ahlers, P. Plavchan, S. Awiphan, C. Kotnik, K. K. McLeod, G. Murawski, H. Chotani, D. LeBrun, W. Matzko, D. Rea, M. Vidaurri, S. Webster, J K. Williams, L. S. Cox, N. Tan, & E. A. Gilbert. "An Unusual Transmission Spectrum for the Sub-Saturn KELT-11b Potentially Suggestive of a Sub-Solar Water Abundance". AJ, 160, 280, Oct 2020.
- [4] P. A. Dalba & P. Tamburo. "Spitzer Detection of the Transiting Jupiter-analog Exoplanet Kepler-167e." ApJL, 873, L17, Mar 2019.
- [5] K. Sheppard, A. Mandell, P. Tamburo, S. Gandhi, A. Pinhas, N. Madhusudhan, & D. Deming. "Evidence for a Dayside Thermal Inversion and High Metallicity for the Hot Jupiter WASP-18b". ApJL, 850, L32, Nov 2017.

As first author, conference abstracts

- [6] **P. Tamburo**, P. Withers, L. Moore, P. A. Dalba, & T. Koskinen. "Reanalysis of Cassini Radio Occultation Data and Electron Density Profiles for Saturn". *AGUFM*, Dec 2019.
- [7] P. Tamburo, A. Mandell, D. Deming, & E. Garhart. "Confirming Variability in the Secondary Eclipse Depth of the Rocky Super-Earth 55 Cancri e". B.A.A.S., 229, 219.04, Jan 2017.

As coauthor, conference abstracts

- [8] K. Colon, L. Kreidberg, M. R. Line, N. Madhusudhan, T. Beatty, P. Tamburo, K. Stevenson, A. M. Mandell, L. Welbanks, D. Angerhausen, J. Fortney, D. James, J. Johnson, E. D. Lopez, B. M. Morris, J. Pepper, J. Rodriguez, & K. G. Stassun. "An Investigation of the Atmosphere of the Extremely Inflated Exoplanet KELT-11b with HST and Spitzer". B.A.A.S., 233, 205.01, Jan 2019.
- [9] K. Sheppard, A. Mandell, P. Tamburo, S. Gandhi, A. Pinhas, N. Madhusudhan, & D. Deming. "Evidence for a Dayside Thermal Inversion and High Metallicity for the Hot Jupiter WASP-18b". B.A.A.S., 231, 211.03, Jan 2018.

Presentations

D 0010	ACTUE HAVE CORE CARE
Dec 2019	AGU Fall Meeting, San Francisco, CA - Poster
Jan 2019	Boston Area Exoplanet Science Meeting 5, Boston University, Boston, MA -
	Contributed Talk
DEC 2018	AGU Fall Meeting, Washington, D.C Contributed Talk
Jul 2018	Cool Stars 20, Boston University, Boston, MA - Poster
Jul 2018	2018 Sagan Exoplanet Summer Workshop, California Institute of Technology,
	Pasadena, CA - Poster
Jun 2018	Emerging Researchers in Exoplanet Science IV, Penn State University, State
	College, PA - Poster
Jul 2017	Enabling Transiting Exoplanet Observations with JWST, Space Telescope
	Science Institute, Baltimore, MD - Poster
Jan 2017	229th Meeting of the American Astronomical Society, Grapevine, TX -
	Contributed Talk
Apr 2016	Undergraduate Research Day, University of Maryland, College Park, MD -
	Poster

Telescope Time

As PI

DISCOVERY CHANNEL TELESCOPE, Lowell Observatory, Jul 2019, 5 nights

The Sagitta sdM Survey (SsdMS): A Search for Transiting Exoplanets around Low-metallicity M dwarfs with DCT-LMI

Perkins Telescope, Lowell Observatory, May 2018 - Nov 2018, 15 nights

Commissioning study for multi-year search for transiting planets around L and T dwarfs.

As Co-I

SPITZER SPACE TELESCOPE, Cycle 14 (Dec 2018), 10 hours

Photometric observations to search for the transit of the long-period exoplanet Kepler-167e.

Workshops Attended

TESS Data Workshop, Space Telescope Science Institute, Feb 2019

Sagan Exoplanet Summer Workshop, California Institute of Technology, Jul 2018

Enabling Transiting Exoplanet Observations with JWST, Space Telescope Science Institute, Jul 2017

Media Coverage

"A step by step guide to finding planets around ultracool dwarfs", Astrobites, Aug 2019

Professional Service

Nov 2019 - Present | Perkins Telescope Observatory TAC Graduate Student Reviewer

ACADEMIC SERVICE

SEP 2020 - PRESENT | Graduate student representative