# William Waalkes

William.Waalkes@Colorado.edu

## Education

| 2017- (PhD)    | University of Colorado, Boulder, CO                         |
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|                | PhD Candidate, Astrophysics & Planetary Sciences Department |
| 2013-16 (B.S.) | University of Michigan, Ann Arbor, MI                       |
|                | BS, Magna Cum Laude, Astronomy & Astrophysics, Physics      |

## **Employment History**

| 2017-   | PhD Candidate, CU Boulder APS Department                       |
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| 2014-16 | Research Assistant, U of M Astronomy & Astrophysics Department |
| 2015    | REU Intern, Smithsonian Astrophysical Observatory              |
| 2014    | REU Intern, U of M Space Sciences Department                   |

## **Awards & Honors**

| 2018 | NSF Graduate Research Fellow  |
|------|---|
| 2017 | NSF GRFP Honorable Mention  |
| 2016 | Chambliss Astronomy Achievement Student Award, Undergrad. Honorable Mention |

#### **Publications**

**Waalkes, W.** et al., TOI 122b and TOI 237b, "Two Small Warm Exoplanets Orbiting Inactive M Dwarfs Found by TESS." (2021), AJ.

**Waalkes, W.** et al., "Constraining neutral hydrogen outflow and stellar host Lyman-alpha reconstruction for transiting super-Earth GJ1132b." (2019), AJ.

Crossfield, I., William W. et al., "A Super-Earth and Sub-Neptune Transiting the Late-type M Dwarf LP 791-18." (2019), ApJ.

Tucker, O., **Waalkes, W.** et al., "Examining the Exobase Approximation: DSMC Models of Titan's Upper Atmosphere." (2016), Icarus.

Giacalone, S., and 36 other authors including **William Waalkes.** "Vetting of 384 TESS Objects of Interest with TRICERATOPS and Statistical Validation of 12 Planet Candidates" (2021), AJ

Vanderspek, R., and 46 other authors including **William Waalkes**. "TESS Discovery of an Ultra-Short-Period Planet around the Nearby M Dwarf LHS 3844." (2019), ApJ.

Bean, J., and 101 other authors including **William Waalkes**. "The Transiting Exoplanet Community Early Release Science Program for JWST." (2019), PASP.

## **Teaching Experience**

| 2021 | TA, Astronomy 1040: Accelerated Intro Astronomy 2                 |
|------|---|
|      | University of Colorado Boulder                                    |
| 2020 | TA, Astronomy 3510: Astronomical Observations and Instrumentation |
|      | University of Colorado Boulder                                    |
| 2018 | TA, Astronomy 3400: Research Methods                              |
|      | University of Colorado Boulder                                    |
| 2016 | Lab Instructor, Astronomy 102: Introductory Astronomy             |
|      | University of Michigan  |
| 2016 | Lab Instructor, Astronomy 101: The Solar System                   |
|      | University of Michigan  |

## **Presentations**

- 2019 American Astronomical Society 233<sup>rd</sup> Meeting. "*Lyman-alpha transit observations of the warm rocky exoplanet GJ1132b.*" Talk.
- 2018 Cool Stars 20 Conference, Boston, MA. "Lyman-alpha transit observations of the warm rocky exoplanet GJ1132b." Poster.
- 2016 American Astronomical Society 227<sup>th</sup> Meeting, Kissimmee, FL. "Spatial Distribution of Small Organics in Prestellar and Protostellar Cores." Poster. (Chambliss Honorable Mention Recipient)
- 2015 SAO Summer Intern Symposium at the Harvard-Smithsonian Center for Astrophysics, Cambridge, MA. "Spatial Distribution of Small Organics in Prestellar and Protostellar Cores." Talk.
- 2015 Astronomy Undergraduate Poster Session, University of Michigan, Ann Arbor, MI. "A Survey of HCN Abundance in Hot Cores." Poster.
- 2014 REU Summer Symposium, University of Michigan, Ann Arbor, MI. "Modeling Titan's Exosphere Using the Direct Simulation Monte Carlo Method." Talk.

# **Observing Experience**

| 2021    | Apache Point Observatory 3.5m Telescope                         |
|---------|---|
| 2018-20 | Las Cumbres Observatory (LCOGT)                                 |
| 2018    | Astronomy Research Consortium Small Aperture Telescope (ARCSAT) |
| 2015    | MDM Observatory   |

### Service & Outreach

| 2021    | CU Boulder APS Graduate Admissions Committee                |
|---------|---|
| 2017-20 | Public outreach at the Somers-Bausch Observatory            |
| 2017-20 | Mentor and research advisor for a local high school student |