

# ASHLEY CHONTOS

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## EDUCATION

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|---|----------------------|
| Ph.D., Astronomy, University of Hawai'i at Mānoa                                      | (expected June 2022) |
| Thesis: <i>Precise Stellar and Planet Properties in the Kepler, K2 &amp; TESS Era</i> |                      |
| Advisor: Daniel Huber   |                      |
| M.Sc., Astronomy, University of Hawai'i at Mānoa                                      | 2018                 |
| B.Sc., Mathematics, <i>Summa Cum Laude</i> , SUNY Albany                              | 2016                 |
| Focuses: Statistics, Applied Mathematics  |                      |
| Minor: Computer Science   |                      |
| B.Sc., Physics, <i>Summa Cum Laude</i> , SUNY Albany                                  | 2016                 |

## PROFESSIONAL EMPLOYMENT

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| <i>NSF Graduate Research Fellow</i>                          | 2018–present |
| <i>Research Assistant</i> , University of Hawai'i at Mānoa   | 2017–2018    |
| <i>Research Assistant</i> , NASA Goddard Space Flight Center | 2016         |
| <i>Research Assistant</i> , Stanford University              | 2015–2016    |

## RESEARCH INTERESTS

Asteroseismology, stellar evolution, exoplanet detection and characterization, photometry, spectroscopy, precise radial velocities, software development, computational astrophysics, post main-sequence planetary system dynamics and evolution, space telescopes, astronomical surveys.

## SELECTED HONORS & AWARDS

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| Friends of the IfA Outreach Award                        | 2019 |
| ARCS (Achievement Reward for College Scientists)         | 2019 |
| National Science Foundation Graduate Research Fellowship | 2018 |
| Outstanding Outreach Award                               | 2017 |
| John C. Mather Nobel Scholar                             | 2016 |

## SELECTED TALKS

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|---|----------------|
| Stanford KIPAC Tea Talk ( <i>invited</i> )                      | November 2021  |
| University of Chicago Exoplanet Journal Club ( <i>invited</i> ) | September 2021 |
| Carnegie EPL Astronomy Seminar ( <i>invited</i> )               | September 2021 |
| TESS Science Talk, MIT ( <i>invited</i> )                       | September 2021 |
| Keck Science Meeting  | September 2021 |
| TESS SciCon II  | August 2021    |
| The Good Vibrations Seminar ( <i>invited</i> )                  | February 2021  |
| Yale Exoplanets & Stars Seminar ( <i>invited</i> )              | September 2020 |
| Exoplanets III, Heidelberg, Germany                             | July 2020      |
| TASC5, MIT, Cambridge, USA                                      | July 2019      |
| TESS SciCon I, MIT, Cambridge, USA                              | July 2019      |
| Kepler/K2 SciCon V, Glendale, CA                                | March 2019     |
| TASC4, Aarhus, Denmark  | July 2018      |
| Columbia University Astronomy Seminar ( <i>invited</i> )        | October 2017   |

## TEACHING, SERVICE & LEADERSHIP

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|--|------------------------|
| <i>Mentor</i> for high school students through HI STAR               | 2017– <i>present</i>   |
| <i>Astronomy Graduate Outreach Coordinator &amp; Volunteer</i>       | 2016–2020              |
| Selected Events:   |                        |
| · Punahou Speaker Series (Oahu, HI)                                  | 2018– <i>present</i>   |
| · Boy Scouts of Hawai‘i Astronomy Merit Badge (Oahu, HI)             | 2017, 2018, 2019       |
| · Stem Fest (Oahu, HI)   | 2017, 2018, 2019       |
| · Hawaiian Astronaut Lacy Veach Day (Oahu, HI)                       | 2017, 2018, 2019       |
| · Astroday (Big Island, HI)  | 2016, 2017a/b, 2018a/b |
| <i>Teaching Assistant</i> , ASTR 110: Lab, University of Hawai‘i     | 2016                   |
| <i>Teaching Assistant</i> , ASTR 110: Lecture, University of Hawai‘i | 2016                   |
| <i>Teaching Assistant</i> , ICSI 124X: Lecture, SUNY Albany          | 2013, 2014             |

## PRESS COVERAGE

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Kepler’s First Exoplanet Discovery [Chontos et al. 2019]: The discovery was announced during my talk at Kepler SciCon V, which included a coordinated press release between [NASA] and [UH]. Articles featuring the science result included [CNN], [Space.com], [Universe Today], [Science News], and many others. The story made the front page of the main [Hawaiian newspaper] as well as my [hometown newspaper]. I was also invited as a guest speaker to talk about the planet on live [Hawai‘i public radio].

## AWARDED TELESCOPE TIME & OBSERVING EXPERIENCE

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| <i>PI</i> , 16 nights over 4 semesters using HIRES on Keck I 10m Telescope      | 2019– <i>present</i> |
| <i>Exoplanets Orbiting Subgiants: Benchmark Systems with TESS</i>               |                      |
| Co-Is: Daniel Huber, Andrew Howard, Howard Isaacson, Lauren Weiss               |                      |
| <i>Co-I</i> , 4 nights in 2019B using HIRES on Keck I 10m Telescope             | 2018                 |
| <i>The TESS-Keck Survey of Exoplanets Orbiting Asteroseismic Host Stars</i>     |                      |
| PI: Daniel Huber; Co-Is: Andrew Howard, Howard Isaacson, Lauren Weiss           |                      |
| <i>Co-I</i> , 0.5 night in 2019B using HIRES on Keck I 10m Telescope            | 2018                 |
| <i>Spin-Orbit Alignment in Kepler’s First Exoplanet System</i>                  |                      |
| PI: Daniel Huber; Co-I: Teruyuki Hirano   |                      |
| <i>Observer</i> , 60 nights on Keck/HIRES through the California Planet Search  | 2018– <i>present</i> |
| <i>Observer</i> , 5 nights on Gemini South/GPI through the GPI Exoplanet Survey | 2015                 |

## SELECTED PEER-REVIEWED PUBLICATIONS [NASA ADS]

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**38 total: 4 first author and 11 with significant contributions, h-index=13, total citations~426**

- Chontos, A.**, Sayeed, M. and Huber, D., “pySYD: Automated Measurements of Global Asteroseismic Parameters,” *JOSS*, *in review*. [NASA ADS]
- Chontos, A.**, et al., “The TESS-Keck Survey: Science Goals and Target Selection,” *in review* (with favorable referee report). [NASA ADS]
- Chontos, A.**, Huber, D., Kjeldsen, H., et al., “TESS Asteroseismology of  $\alpha$  Mensae: Benchmark Ages for a G7 Dwarf and its M-dwarf Companion,” *ApJ*, **922**, 229 (2021). [NASA ADS]
- Guerrero et al. [including **Chontos, A.**], “The TESS Objects of Interest Catalog from the TESS Prime Mission,” *ApJSS*, **254**, 39 (2021). [NASA ADS]
- Huber, D., Chaplin, W., **Chontos, A.**, et al., “A Hot Saturn Orbiting an Oscillating Late Subgiant Discovered by TESS,” *AJ*, **157**, 245 (2019). [NASA ADS]
- Chontos, A.**, Huber, D., Latham, D., et al., “The Curious Case of KOI 4: Confirming Kepler’s First Exoplanet Detection,” *AJ*, **157**, 192 (2019). [NASA ADS]

## REFERENCES

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**Dr. Sara Seager**

*Class of 1941 Professor of Planetary Science*

*Professor of Aeronautics and Astronautics*

*Professor of Physics*

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**Dr. Stephen Kane**

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