Jamie Tayar

Stellar Evolution - Stellar Physics Modeling - Asteroseismology - Spectroscopy

Department of Astronomy, University of Florida Stellar Rotation - Red Giants - Stellar Populations Bryant Space Science Center, Gainesville, FL 32611, US

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Education

Ohio State University, Columbus, Ohio, USA

Doctor of Philosophy, Astronomy, August 2018

Master of Science, Astronomy, December 2014

Thesis: Rotation in Red Giants Advisor: Marc Pinsonneault

California Institute of Technology, Pasadena, California, USA

Bachelor of Science, Astrophysics, June 2012

Thesis: FU Orionis Stars Advisor: Lynne Hillenbrand

Appointments

Assistant Professor, Department of Astronomy, University of Florida Hubble Fellow, Institute for Astronomy, University of Hawai'i

2022-present 2018-2021

Grants and Fellowships Awarded

- 1. NASA Pioneers 2022, PI: Peter Plavchan, Co-I: inc. J. Tayar, The Landolt Mission, Total: \$19,518,466, UF related: \$310,185.
- 2. Roman Research and Support 2022, PI: J. Tayar, Science PI: Z. Claytor, Spots, Faculae, and Ages: The Promise of Rotation with Roman and Deep Learning, \$302,128.
- 3. TESS Guest Investigator Cycle 5, PI: J. Tayar, TESS's Ear on the Metal-poor Milky Way, \$70,000.
- 4. NASA Astrophysics Theory Program 2021, PI: J. Tayar, Modeling Red Giants: A Fundamental Diagnostic for Ages Across the Universe, \$405,459.
- 5. TESS Guest Investigator Cycle 3, PI: J. Tayar, A Library of 20 Second Light Curves, \$40,000.
- 6. TESS Guest Investigator Cycle 2, PI: J. Tayar, Subgiants as Precision Tests of Angular Momentum Evolution, \$50,000.
- 7. TESS Guest Investigator Cycle 1, PI: Pinsonneault, Science PI: Tayar, Subgiants as Precision Tests of Angular Momentum Evolution, \$50,000.
- 8. Hubble Fellowship 2018, Subgiants: Models, Rotation, Convection, and Planets, \$342,963.
- 9. TESS Guest Investigator Cycle 4, PI: D. Huber, Co-I: inc. J. Tayar, Asteroseismology of Bright Solar Analogs, \$50,000.
- 10. NASA ADAP 2020, PI: D. Huber, Co-I: inc. J. Tayar, An All-Sky Catalog of Asteroseismic Benchmark Stars Observed by the TESS Mission, \$345,184.
- 11. Hubble Space Telescope Cycle 28, PI: J. Chisholm, Co-I: inc. J. Tayar, Digging deep into massive star variability: Do massive stars vary due to internal gravity waves or stellar winds?, awarded 26 orbits, \$138,235.
- 12. TESS Guest Investigator Cycle 3, PI: J. van Saders, Co-I: inc. J. Tayar, Maximizing the science yield for main sequence and subgiant stars in the TESS Southern Continuous Viewing Zone, \$200,000.

Publication Summary

89 total, 10 first author, 12 second author, 5 led by my students; 11431+ citations; h-index: 41

Leadership

SDSS-V Milky Way Mapper: Red Giant Seismology Working Group Co-Chair	2022-present
Conference Coordinator, KITP: Transport In Stellar Interiors	Nov. 2021
Co-organizer, KITP Program: Probes of Transport in Stars	OctDec. 2021
APOGEE Stellar Astrophysics Sprint Lead	Jan. 2021
University of Hawai'i Telescope Allocation Committee	2020-2021
NASA Grant Panelist	2019, 2021, 2023
Committee On Inclusiveness in the SDSS (COINS) Member	2016-2018
APOGEE-Kepler Catalog Manager	2014-Present

Postdoctoral Researchers Advised

Zachary Claytor University of Florida

Students Advised

Leslie Morales Graduate Student, University of Florida Corin Marasco Graduate Student, University of Florida Ellis Avallone Graduate Student, Institute for Astronomy, University of Hawai'i NSF GRFP Honorable Mention Diego Godoy-Rivera Graduate Student, Ohio State University Erica Bufanda Graduate Student, Institute for Astronomy, University of Hawai'i Awarded Best IfA second year project, Outstanding Research Presentation at SACNAS 2019 Don Dixon Graduate Student, Fisk University, Vanderbilt University Susan Byrom Undergraduate Student, REU, University of Illinois Meir Schochet University Research Scholar, Undergraduate Student, University of Florida Sophia Grusnis Undergraduate Student, University of Florida Jakob Bindas Undergraduate Student, REU, University of Pittsburgh Cooper DeVane-Prugh Undergraduate Student, University of Florida Carmen Michaud Undergraduate Student, University of Florida

College Research Scholar, Undergraduate Student, University of Florida

Invited Talks and Colloquia

Artemis Theodoridis

Princeton / Institute for Advanced Study, 2024 Colloquium Virginia Tech, 2024 Colloquium Georgia State University, 2024 Colloquium Yale University, 2023 Colloquium Colloquium University of Texas Austin, 2023 MESA Summer School, 2023 Invited Lecturer University Cidade de São Paulo, 2023 Colloquium California Institute of Technology, 2023 Colloquium Colloquium Space Telescope Science Institute, 2023 Colloquium Konkoly Observatory, 2023 Center for Computational Astrophysics, 2022 Colloquium Indiana University, 2022 Colloquium University of Graz, 2022 Colloquium Fifty Years of the Skumanich Relations, 2022 Invited Talk TESS Science Conference 2, 2021 Invited Talk Aspen Workshop: Galactic Archaelogy with Fundamental Stellar Parameters, 2021 Invited Talk University of Surrey, 2021 Colloquium Colloquium Texas A&M University, 2021 University of Florida, 2021 Colloquium Colloquium University of Alabama, 2021 University of Notre Dame, 2021 Colloquium University of Utah, 2021 Colloquium Colloquium Boston University, 2021

Florida Institute of Technology, 2020 Colloquium Mississippi State University, 2020 Colloquium Colloquium University of Pittsburgh, Astronomy Seminar, 2020 Invited Seminar Richard and Patricia Wagner Seminar, Berea College, 2020 KASC-12/TASC-5, MIT, Cambridge, MA, 2019 Invited Talk Planet-Star Connections in the Era of TESS and Gaia, KITP, 2019 Invited Talk Invited Talk Better Stars, Better Planets, Kavli Institute for Theoretical Physics, 2019 Institute for Astronomy, University of Hawaii- Manoa, 2018 Colloquium Invited Talk The Metal-poor Galaxy, Ringberg Castle, Germany, 2018 Exoplanets Orbiting Hot Stars, Vanderbilt University, 2018 Invited Talk Physics and Astronomy Department Seminar, Rice University, 2018 Colloquium Stellar Astrophysics Centre Seminar, Aarhus University, Denmark, 2018 Colloquium SDSS-IV Collaboration Meeting, Madison, WI, 2016 Invited Talk Cool Stars 19, Uppsala, Sweden, 2016 Prize Talk (Best Graduate Poster)

Teaching Experience

Professor, University of Florida

Astronomy & Astrophysics 2 (Introductory Majors, General Science), Spring 2024

Galactic Astronomy (Senior Majors), Fall 2023

Observational Techniques (Upper Division Majors), Spring 2022, Spring 2023

Guest Lecturer, Institute for Astronomy, University of Hawaii

Radiative Processes (Graduate Level), Spring 2020

Service and Outreach

Referee ApJ, A&A

Public Planetarium Presentation, Stelliferous, The Bishop Museum of Science and Nature, 2022

Science Fair Judge: 2018, 2021

Sigma Xi Science Café Invited Talk: Eclipse 2017

Public Talk, Astronomy on Tap, Columbus

Breakfast of Science Champions Co-organizer 2016

References

Marc Pinsonneault	The Ohio State University	pinsonneault.1@osu.edu
Daniel Huber	Institute for Astronomy, University of Hawai'i	huberd@hawaii.edu
Jennifer Johnson	The Ohio State University	johnson. 3064@osu.edu

Additional References

Jennifer van Saders Institute for Astronomy, University of Hawai'i ilvs@hawaii.edu Keivan Stassun keivan.stassun@vanderbilt.edu Vanderbilt University Rafael García Département d'Astrophysique, IRFU/DRF/CEA Saclay rafael.garcia@cea.fr

Publications

First Author Publications

- 1. Tayar, Jamie; Carlberg, Joleen; Aguilera Gomez, Claudia and Saveed, Maryum. "Lithium in Kepler Red Giants: Defining Normal and Anomalous" 2023, AJ, 166, 60.
- 2. Tayar, Jamie; Moyano, Facundo D.; Soares-Furtado, Melinda and 15 coauthors. "Spinning up the Surface: Evidence for Planetary Engulfment or Unexpected Angular Momentum Transport?" 2022, ApJ, 940, 23.
- 3. Tayar, Jamie; Joyce, Meridith. "Is Thermohaline Mixing the Full Story? Evidence for Separate Mixing Events near the Red Giant Branch Bump" 2022, ApJ, 935, 30.
- 4. Tayar, Jamie; Claytor, Zachary R.; Huber, Daniel; and van Saders, Jennifer. "A Guide to Realistic Uncertainties on Fundamental Properties of Solar-type Exoplanet Host Stars" 2022, ApJ, 927, 31.

- 5. **Tayar, Jamie**; Beck, Paul G.; Pinsonneault, Marc H. and 2 coauthors. "Core-Envelope Coupling in Intermediate-Mass Core Helium Burning Stars" 2019, ApJ, 887, 203.
- 6. **Tayar, Jamie**; Stassun, Keivan G.; Corsaro, Enrico. "Predicting Granulation "Flicker" and Radial Velocity "Jitter" from Spectroscopic Observables" 2019, ApJ, 883, 195.
- 7. Tayar, Jamie; Pinsonneault, Marc H.. "Testing Angular Momentum Transport and Wind Loss in Intermediate Mass Core Helium Burning Stars" 2018, ApJ, 868, 150.
- 8. **Tayar, Jamie**; Somers, Garrett; Pinsonneault, Marc H.; and 28 coauthors. "The Correlation Between Mixing Length and Metallicity On the Giant Branch: Implications for Ages in the Gaia Era" 2017, ApJ, 840, 17.
- 9. **Tayar, Jamie**; Ceillier, Tugdual; García-Hernández, D. A. and 17 coauthors. "Rapid Rotation of Low-mass Red Giants Using APOKASC: A Measure of Interaction Rates on the Post-main-sequence" 2015, ApJ, 807, 82.
- 10. **Tayar, Jamie**; Pinsonneault, Marc H.. "Implications of Rapid Core Rotation in Red Giants for Internal Angular Momentum Transport in Stars" 2013, ApJL, 775, 1.

Contributing Author Publications: Significant Contribution

- 11. Pinsonneault, Marc H.; Zinn, Joel C.; **Tayar, Jamie**; and 38 coauthors. "APOKASC-3: The Third Joint Spectroscopic and Asteroseismic Catalog for the Evolved Stars in the Kepler Fields" Submitted.
- 12. Joyce, Meridith; **Tayar**, **Jamie**. "A Review of the Mixing Length Theory of Convection in 1D Stellar Modeling" 2023, Galaxies, 11, 75.
- 13. Joyce, Meridith; **Tayar, Jamie**; Lecoanet, Daniel. "Gender Disparity in Publishing Six Months after the KITP Workshop "Probes of Transport in Stars" "2022, PASP, 134, 4503.
- Fraser, Adrian; Joyce, Meridith; Anders, Evan; Tayar, Jamie, Cantiello, Matteo. "Observed Extra Mixing Trends in Red Giants are Reproduced by the Reduced Density Ratio in Thermohaline Zones" 2022, ApJ, 941, 164.
- 15. Jermyn, Adam; **Tayar, Jamie**; Fuller, Jim. "Differential Rotation in Convective Envelopes: Constraints from Eclipsing Binaries" 2020, MNRAS, 491, 690.
- 16. Shetrone, Matthew; **Tayar**, **Jamie**; Johnson, Jennifer A.; and 13 coauthors. "Constraining Metallicity Dependent Mixing and Extra Mixing Using [C/N] in Alpha-rich Field Giants" 2019, ApJ, 872, 137.
- 17. Ceillier, T.; **Tayar**, **J**.; Mathur, S.; and 7 coauthors. "Surface rotation of Kepler red giant stars" 2017, A&A, 605, 111.
- 18. Cody, Ann Marie; **Tayar, Jamie**, Hillenbrand, Lynne A.; and 2 coauthors. "Precise High-cadence Time Series Observations of Five Variable Young Stars in Auriga with MOST" 2013, AJ, 145, 79.

Papers Led By Students: Primary Advisor

- 19. Grusnis, Sophia; **Tayar, Jamie N.**; and Godoy Rivera, Diego. "TESS Subgiant Asteroseismology in the Continuous Viewing Zone" Submitted.
- 20. Bufanda, Erica; **Tayar, Jamie N.**; Huber, Daniel; and 2 coauthors. "Investigating APOKASC Red Giant Stars with Abnormal Carbon to Nitrogen Ratios" 2023, ApJ, 959, 123.
- 21. Avallone, Ellis A.; **Tayar, Jamie N.**; van Saders, Jennifer L.; and 6 coauthors. "Rotation Distributions around the Kraft Break with TESS and Kepler: The Influences of Age, Metallicity, and Binarity" 2022, ApJ, 930, 7.
- 22. Godoy-Rivera, Diego; **Tayar, Jamie**; Pinsonneault, Marc; and 6 coauthors. "Testing the Limits of Precise Subgiant Characterization with APOGEE and Gaia: Opening a Window to Unprecedented Astrophysical Studies" 2021, ApJ, 915,19.
- 23. Dixon, Don; **Tayar, Jamie**; Stassun, Keivan. "Rotationally Driven Ultraviolet Emission of Red Giant Stars" 2020, AJ, 160, 12.

Research Notes with Undergraduates: Primary Advisor

- Byrom, Susan and **Tayar**, **Jamie**. "Identifying Uncertainties in Stellar Evolution Models Using the Open Cluster M67." 2024, RNAAS, submitted.
- Schochet, Meir; **Tayar**, **Jamie**; and Andrews, Jeff J. "A Lack of Mass-gap Compact Object Binaries in APOGEE" 2024, RNAAS, 8, 166.
- Tayar, Jamie., Claytor, Z, Fox, Quentin and 26 more. "The Importance of Neural Network Hyperparameters in Determining Age Inference Quality" 2023, RNAAS, 7, 273.
- Theodoridis, Artemis Theano and **Tayar**, **Jamie**. "Assessing the Accuracy of TESS Asteroseismology with APOGEE" 2023, RNAAS, 7, 148.

Papers Led By Graduate Students: Other

- 24. Spoo, Taylor; Thomas, Katelyn; Toguchi-Tani, Ellie "Kaleo"; and 8 coauthors. "Extending the [C/N]-Age Calibration: Using Globular Clusters to Explore Older and Metal-Poor Populations" Submitted.
- 25. Sinha, Amaya; Zasowski, Gail; Frinchaboy, Peter and 4 coauthors. "A Comprehensive Study of Open Cluster Chemical Homogeneity using APOGEE and Milky Way Mapper Abundances" Submitted.
- 26. Roberts, John D.; Pinsonneault, Marc H.; Johnson, Jennifer A. and 16 coauthors. "Nature vs. Nurture: Distinguishing Effects from Stellar Processing and Chemical Evolution on Carbon and Nitrogen in Red Giant Stars" 2024, MNRAS, 530,149.
- Warfield, Jack T.; Zinn, Joel C.; Schonhut-Stasik, Jessica and 11 coauthors. "The APO-K2 Catalog. II. Accurate Stellar Ages for Red Giant Branch Stars Across the Milky Way" 2024, AJ, 167, 208.
- 28. Povick, Joshua T.; Nidever, David L.; Massana, Pol and 12 more. "Revealing the Chemical Structure of the Magellanic Clouds with APOGEE. I. Calculating Individual Stellar Ages of RGB Stars in the Large Magellanic Cloud" Submitted, ArXiv.
- Patton, Rachel A.; Pinsonneault, Marc H.; Cao, Lyra and 6 coauthors "Spectroscopic identification of rapidly rotating red giant stars in APOKASC-3 and APOGEE DR16" 2024, MN-RAS, 528, 3223.
- Schonhut-Stasik, Jessica; Zinn, Joel; Stassun, Keivan; and 13 coauthors. "The APO-K2 Catalog. I. 7,673 Red Giants with Fundamental Stellar Parameters from APOGEE DR17 Spectroscopy and K2-GAP Asteroseismology" 2024, AJ, 167, 50.
- 31. Jayasinghe, T.; Thompson, Todd A., Kochanek, C.S.; and 13 coauthors. "The 'Giraffe': Discovery of a stripped red giant in an interacting binary with a 2 M_{\odot} lower giant" 2022, MN-RAS, 516, 5945.
- 32. Spoo, Taylor; **Tayar, Jamie**; Frinchaboy, Peter M.; and 11 coauthors. "The Open Cluster Chemical Abundances and Mapping Survey: VII. APOGEE DR17 [C/N]-Age Calibration" 2022, AJ, 163, 229.
- 33. Mazzola Daher, Christine; Badenes Carles; **Tayar, Jamie**; and 18 coauthors. "Stellar multiplicity and stellar rotation: Insights from APOGEE" 2022, MNRAS, 512, 2051.
- 34. Wilson, Robert F.; Cañas, Caleb I.; Majewski, Steven R.; and 15 coauthors. "The Influence of 10 Unique Chemical Elements in Shaping the Distribution of Kepler Planets" 2022, AJ, 163, 128.
- 35. Nofi, Larissa A.; Johns-Krull, Christopher M.; López-Valdivia, Ricardo; and 11 coauthors. "Projected Rotational Velocities and Fundamental Properties of Low-Mass Pre-Main Sequence Stars in the Taurus-Auriga Star Forming Region" 2021, ApJ, 911, 138.
- 36. Hall, Oliver J.; Davies, Guy R. van Saders, Jennifer; and 9 coauthors. "Asteroseismic rotation rates of 91 main sequence stars show strong agreement with weakened magnetic braking at late ages" 2021, Nature Astronomy, 71.
- 37. Berger, Travis A.; Huber, Daniel; van Saders, Jennifer L.; and 3 coauthors. "The Gaia Kepler Stellar Properties Catalog I: Homogeneous Fundamental Properties for 186,000 Kepler Stars" 2020, AJ, 159, 280.

38. Claytor, Zach; van Saders, Jennifer; Santos, Ângela; and 5 coauthors. "Chemical Evolution in the Milky Way: Rotation-based ages for APOGEE-Kepler cool dwarf stars" 2020, ApJ, 888, 43.

Contributing Author Publications: Work Uses My APOGEE-Kepler Catalog

- 39. Almeida, Andrs; Anderson, Scott F.; Argudo-Fernndez, Maria and 150 coauthors. "The Eighteenth Data Release of the Sloan Digital Sky Surveys: Targeting and First Spectra from SDSS-V" 2023, ApJS, 267, 44.
- 40. Jofre, P.; Jorissen, A.; Aguilera-Gomez, C. and 6 coauthors. "Cannibals in the thick disk II Radial-velocity monitoring of the young alpha-rich stars" 2023, A&A, 671, 21.
- 41. Abdurro'uf; Accetta, Katherine; Aerts, Conny; and 336 coauthors. "The Seventeenth Data Release of the Sloan Digital Sky Surveys: Complete Release of MaNGA, MaStar and APOGEE-2 Data" 2022, ApJS, 259, 35.
- 42. Beaton, Rachael L.; Oelkers, Ryan J.; Hayes, Christian R. and 50 coauthors. "Final Targeting Strategy for the Sloan Digital Sky Survey IV Apache Point Observatory Galactic Evolution Experiment 2 North Survey" 2021, AJ, 162, 302.
- 43. Ahumada, Romina; Allende Prieto, Carlos; Almeida, Andres; and 310 coauthors. "The Sixteenth Data Release of the Sloan Digital Sky Surveys: First Release from the APOGEE-2 Southern Survey and Full Release of eBOSS Spectra" 2020, ApJS, 249, 3.
- 44. Lian, Jianhui; Thomas, Daniel; Maraston, Claudia; and 6 coauthors. "Age-chemical abundance structure of the Galaxy I: Evidence for a late accretion event in the outer disc at $z \sim 0.6$ " 2020, MNRAS, 494, 2561.
- 45. Elsworth, Yvonne; Hekker, Saskia; Johnson, Jennifer; and 10 coauthors. "Insights from the APOKASC Determination of the Evolutionary State of Red-Giant Stars by consolidation of different methods" 2019, MNRAS, 489, 4641.
- 46. Mackereth, J. Ted; Bovy, Jo; Leung, Henry W.; and 14 coauthors. "Dynamical heating across the Milky Way disc using APOGEE and Gaia" 2019, MNRAS, 489, 176.
- 47. Aguado, D. S.; Ahumada, Romina; Almeida, Andres; and 231 coauthors. "The Fifteenth Data Release of the Sloan Digital Sky Surveys: First Release of MaNGA Derived Quantities, Data Visualization Tools and Stellar Library" 2019, ApJS, 240, 23.
- 48. Pinsonneault, Marc H.; Elsworth, Yvonne P.; **Tayar**, **Jamie**; and 33 coauthors. "The Second APOKASC Catalog: The Empirical Approach" 2018, ApJS, 239, 32.
- 49. Holtzman, Jon A.; Hasselquist, Sten; Shetrone, Matthew; Cunha, Katia; and 22 coauthors. "APOGEE Data Releases 13 and 14: Data and Analysis" 2018, AJ, 156, 125.
- 50. Silva Aguirre, V.; Bojsen-Hansen, M.; Slumstrup, D.; and 21 coauthors. "Confirming chemical clocks: asteroseismic age dissection of the Milky Way disk(s)" 2018, MNRAS, 475, 5487.
- 51. Abolfathi, Bela; Aguado, D. S.; Aguilar, Gabriela; and 324 coauthors. "The Fourteenth Data Release of the Sloan Digital Sky Survey: First Spectroscopic Data from the extended Baryon Oscillation Sky Survey and from the second phase of the Apache Point Observatory Galactic Evolution Experiment" 2018, ApJS, 235, 42.
- 52. Johnson, Marshall C.; Rodriguez, Joseph E.; Zhou, George; and 63 coauthors. "KELT-21b: A Hot Jupiter Transiting The Rapidly-Rotating Metal-Poor Late-A Primary of a Likely Hierarchical Triple System" 2018, AJ, 155, 100.
- 53. Albareti, Franco D.; Allende Prieto, Carlos; Almeida, Andres; and 341 coauthors. "The Thirteenth Data Release of the Sloan Digital Sky Survey: First Spectroscopic Data from the SDSS-IV Survey Mapping Nearby Galaxies at Apache Point Observatory" 2017, ApJS, 233, 25.
- 54. Serenelli, Aldo; Johnson, Jennifer; Huber, Daniel; and 23 coauthors. "The First APOKASC Catalog of Kepler Dwarf and Subgiant Stars" 2017, ApJS, 233, 23.
- 55. Bossini, D.; Miglio, A.; Salaris, M.; and 9 coauthors. "Kepler red-clump stars in the field and in open clusters: constraints on core mixing" 2017, MNRAS, 469, 4718.

- 56. Zasowski, G.; Cohen, R. E.; Chojnowski, S. D.; and 32 coauthors. "Target Selection for the SDSS-IV APOGEE-2 Survey" 2017, AJ, 154, 198.
- 57. Huber, Daniel; Zinn, Joel; Bojsen-Hansen, Mathias; and 17 coauthors. "Asteroseismology and Gaia: Testing Scaling Relations Using 2200 Kepler Stars with TGAS Parallaxes" 2017, ApJ, 844, 102.
- 58. Corsaro, E.; Mathur, S.; Garca, R. A.; and 9 coauthors. "Metallicity effect on stellar granulation detected from oscillating red giants in open clusters" 2017, A&A 605, 3.
- Blanton, Michael R.; Bershady, Matthew A.; Abolfathi, Bela; and 350 coauthors. "Sloan Digital Sky Survey IV: Mapping the Milky Way, Nearby Galaxies and the Distant Universe" 2017, AJ, 154, 28.
- 60. Alam, Shadab; Albareti, Franco D.; Allende Prieto, Carlos; and 301 coauthors. "The Eleventh and Twelfth Data Releases of the Sloan Digital Sky Survey: Final Data from SDSS-III" 2015, ApJS, 219, 12.

Contributing Author Publications: Contributed Data Analysis and/or Model Interpretation

- 61. Ong, J. M. Joel; Yen Hon, Marc Teng; Soares-Furtado, Melinda and 19 coauthors. "The Gasing Pangkah Collaboration: I. Asteroseismic Identification and Characterisation of a Rapidly-Rotating Engulfment Candidate" 2024, ApJ, 966, 42.
- 62. Ji, Alexander P.; Curtis, Sanjana; Storm, Nicholas and 39 coauthors. "Spectacular Nucleosynthesis from Early Massive Stars" 2024, ApJ, 961, 41.
- 63. Joyce, Meridith; Molnr, Lszl; Cinquegrana, Giulia and 3 coauthors. "Stellar Evolution in Real Time II: R Hydrae and an Open-Source Grid of >3000 Seismic TP-AGB Models Computed with MESA" 2024, ArXiv.
- 64. Jones, Amy M.; Beaton, Rachael L.; Cherinka, Brian A. and 24 coauthors. "SDSS-IV from 2014 to 2016: A Detailed Demographic Comparison over Three Years" 2023, PASP, 135, 4503.
- 65. Hon, Marc; Huber, Daniel; Rui, Nicholas Z.; and 39 coauthors. "A close-in giant planet escapes engulfment by its star" 2023, Nature, 618, 917.
- 66. Eastman, Jason D.; Diamond-Lowe, Hannah; and **Tayar**, **Jamie**. "Beating stellar systematic error floors using transit-based densities" 2023, AJ, 166, 132.
- 67. Brogaard, K.; Arentoft, T.; Slumstrup, D.; and 16 coauthors. "Establishing the accuracy of asteroseismic mass and radius estimates of giant stars using eclipsing binaries III. KIC4054905, two 10 Gyr thick disk RGB stars" 2022, A&A, 668, 82.
- 68. Hon, Marc; Huber, Daniel; Kuszlewicz, James; and 6 coauthors. "A 'Quick Look' at All-Sky Galactic Archeology with TESS: 158,000 Oscillating Red Giants from the MIT Quick-Look Pipeline" 2021, ApJ, 919, 131.
- 69. Grunblatt, Samuel K.; Zinn, Joel;, Price-Whelan, Adrian M.; and 12 coauthors. "Age-Dating Red Giant Stars Associated with Galactic Disk and Halo Substructures" 2021, ApJ, 916, 88.
- 70. Mackereth, J. Ted; Miglio, Andrea; Elsworth, Yvonne; and 29 coauthors. "Prospects for Galactic and stellar astrophysics with asteroseismology of giant stars in the TESS Continuous Viewing Zones and beyond" 2021, MNRAS, 502, 1947.
- 71. Thompson, Todd A.; Kochanek, Christopher S.; Stanek, Krzysztof Z.; and 7 coauthors. "Response to Comment on 'A noninteracting low-mass black hole-giant star binary system'" 2020, Science, 368, 4356.
- 72. Silva Aguirre, Victor; Stello, Dennis, Stokholm, Amalie; and 75 coauthors. "Detection and characterisation of oscillating red giants: first results from the TESS satellite" 2020, ApJ, 889, 34.
- 73. Chaplin, William J.; Serenelli, Aldo; Miglio, Andrea; and 82 coauthors. "Age dating of an early Milky Way merger via asteroseismology of the naked-eye star ν Indi" 2020, Nature Astronomy, 4, 382.

- 74. Thompson, Todd A.; Kochanek, Christopher S.; Stanek, Krzysztof Z.; and 13 coauthors. "A noninteracting low-mass black hole–giant star binary system" 2019, Science, 366, 637.
- 75. Huber, Daniel; Chaplin, William J.; Chontos, Ashley; and 138 coauthors. "A Hot Saturn Orbiting An Oscillating Late Subgiant Discovered by TESS" 2019, AJ, 157, 245.
- Hasselquist, Sten; Holtzman, Jon A., Shetrone, Matthew; Tayar, Jamie, and 13 coauthors.
 "APOGEE [C/N] Abundances Across the Galaxy: Migration and Infall from Red Giant Ages"
 2019, ApJ, 871, 181.
- 77. Sandquist, Eric L.; Mathieu, Robert D.; Quinn, Samuel N.; and 16 coauthors. "The K2 M67 Study: A Curiously Young Star in an Eclipsing Binary in an Old Open Cluster" 2018, AJ, 155, 152.
- 78. Ceillier, T.; van Saders, J.; Garcia, R. A.; and 7 coauthors. "Rotation periods and seismic ages of KOIs comparison with stars without detected planets from Kepler observations" 2015, MNRAS, 456, 119.
- 79. Martig, Marie; Rix, Hans-Walter; Aguirre, Victor Silva; and 30 coauthors. "Young α -enriched giant stars in the solar neighbourhood" 2015, MNRAS, 451, 2230.
- 80. Pinsonneault, Marc H.; Elsworth, Yvonne; Epstein, Courtney; and 42 coauthors. "The APOKASC Catalog: An Asteroseismic and Spectroscopic Joint Survey of Targets in the Kepler Fields" 2014, ApJS, 215, 19.
- 81. Epstein, Courtney R.; Elsworth, Yvonne P.; Johnson, Jennifer A.; and 29 coauthors. "Testing the Asteroseismic Mass Scale Using Metal-poor Stars Characterized with APOGEE and Kepler" 2014, ApJL, 785, 28.

Contributing Author Publications: Contributed Observational Data

- 82. Horne, Keith; De Rosa, G.; Peterson, B. M.; and 155 coauthors. "Space Telescope and Optical Reverberation Mapping Project. IX. Velocity-Delay Maps for Broad Emission Lines in NGC 5548" 2021, ApJ, 907, 76.
- 83. Williams, P.R.; Pancoast, A; Treu, T.; and 155 coauthors. "Space Telescope and Optical Reverberation Mapping Project. XII. Broad-line Region Modeling of NGC 5548" 2020, ApJ, 902, 74.
- 84. Kriss, G.A.; De Rosa, G.; Ely, J.; and 164 coauthors. "Space Telescope and Optical Reverberation Mapping Project. VIII. Time Variability of Emission and Absorption in NGC 5548 Based on Modeling the Ultraviolet Spectrum" 2019, ApJ, 881, 153.
- 85. De Rosa, G.; Fausnaugh, M.M.; Grier, C.J.; and 99 coauthors. "Velocity-Resolved Reverberation Mapping of Five Bright Seyfert 1 Galaxies" 2018, ApJ, 866, 133.
- 86. Fausnaugh, M. M.; Starkey, D. A.; Horne, K.; and 69 coauthors. "Continuum Reverberation Mapping of the Accretion Disks in Two Seyfert 1 Galaxies" 2018, ApJ, 854, 107.
- 87. Fausnaugh, M. M.; Grier, C. J.; Bentz, M. C.; and 69 coauthors. "Reverberation Mapping of Optical Emission Lines in Five Active Galaxies" 2017, ApJ, 840, 97.
- 88. Mathur, S.; Gupta, A.; Page, K.; and 147 coauthors. "Space Telescope and Optical Reverberation Mapping Project. VII. Understanding the UV anomaly in NGC 5548 with X-Ray Spectroscopy" 2017, ApJ, 846, 55.
- 89. Pei, L.; Fausnaugh, M. M.; Barth, A. J.; and 153 coauthors. "Space Telescope and Optical Reverberation Mapping Project. V. Optical Spectroscopic Campaign and Emission-Line Analysis for NGC 5548" 2017, ApJ, 837, 131.

Non-Refereed Contributions

- 90. Peretz, Eliad; Plavchan, Peter; Pachowicz, Piotr; **Tayar, Jamie**; and 17 coauthors. "QUASAR QUAsi-Stationary Absolute Radiance Mission" 2022, SPIE.
- 91. Claytor, Zachary R.; van Saders, Jennifer L.; Santos, Ängela R. G. and 5 coauthors. "ki-auhoku: Stellar model grid interpolation" 2020, ASCL, ascl:2011.027.