HODARI-SADIKI JAMES

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Department of Physics and Astronomy, Georgia State University 25 Park Place, 605 \(\Display Atlanta, GA 30302 \)

RESEARCH INTERESTS

Stellar Astrophysics, Stellar Spectroscopy, Ages & Properties of Late Type Stars, and Astrobiology

EDUCATION

EDUCATION	
Ph.D. in Astronomy Georgia State University	Spring 2023 (Expected) Atlanta, GA
M.S. in Physics with Astronomy Concentration Georgia State University	2020 Atlanta, GA
M.S. in Biomedical Engineering University of Cincinnati	2014 Cincinnati, OH
B.A. in Physics minor Biology Berea College	2012 Berea, KY
WORK EXPERIENCE	
Graduate Teaching/Research Assistant Georgia State University	Aug 2017 - Present Atlanta, GA

CHIRON Data Manager, CTIO/SMARTS 1.5m

Dec 2018 - Present Atlanta, GA

GRE and SAT Instructor
Educational Testing Consultants/University of Georgia

Jan 2019 -Jan 2020 Athens, GA

Labsolutions	
Biomedical Engineer	

Georgia State University

Lab Technologist

Mar 2017 - Aug 2017 Atlanta, GA

Castle Medical Graduate Teaching/Research Assistant

Mar 2015 - Dec 2016 Smyrna, GA

University of Cincinnati

Aug 2012 - Dec 2014 Cincinnati, OH

Physics Teaching Assistant

Aug 2009 - May 2012

Berea College

Berea,KY

GRANTS, SCHOLARSHIPS AND AWARDS

SF	REB	Diss	ert	ation	Year	Awa	ard	(\$20,000)
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2022 - 2023

Southern Regional Education Board

Provost's Dissertation Fellowship (\$15,000)

2022-2023

Georgia State University

Chambliss Astronomy Achievement Award at AAS 240

2022

American Astronomical Society

Graduate Student Scholarship Georgia State University Alumni Association	2020
Most Inspirational Alumnus Award Berea College African Students Association	2016
University of Cincinnati SEED Grant recipient University of Cincinnati	2014
Waldemar Noll Prize in Physics Berea College	2012

REFEREED PUBLICATIONS * *

©ORCID:0000-0003-4568-2079

1. The Solar Neighborhood L: Spectroscopic Discovery of K Dwarfs Younger than 1 Gyr and New Binaries within 30 Parsecs

Hubbard-James, H.-S., Lesley, D.X., Henry, T.J., et al., 2022, AJ 164 174.**

- The Solar Neighborhood XLVIII: Nine Giant Planets Orbiting Nearby K Dwarfs, and the CHIRON Spectrograph's Radial Velocity Performance Paredes L. A., Henry T. J., Quinn S. N., Gies D. R., Hinojosa-Goñi R., James H.S., Jao W.-C., et al., 2021, AJ, 162, 176.
- 3. Mapping out the Stellar Populations of IC 2602 and IC 2391 Nisak, A.H., White, R.J., Yep, A., ... James, H.S., et al., 2022, AJ, 163, 278.
- 4. TOI 564 b and TOI 905 b: Grazing and Fully Transiting Hot Jupiters Discovered by TESS Davis A. B., Wang S., Jones M., Eastman J. D., et al., 2020, AJ, 160, 229.
- TOI 694b and TIC 220568520b: Two Low-mass Companions near the Hydrogen-burning Mass Limit Orbiting Sun-like Stars
 Mireles I., Shporer A., Grieves N., Zhou G., Günther M. N., Brahm R., et al., 2020, AJ, 160, 133.
- KELT-25 b and KELT-26 b: A Hot Jupiter and a Substellar Companion Transiting Young A Stars Observed by TESS
 Rodríguez Martínez R., Gaudi B. S., Rodriguez J. E., Zhou G., et al., 2020, AJ, 160, 111.
- 7. A Well-aligned Orbit for the 45 Myr-old Transiting Neptune DS Tuc Ab Zhou G., Winn J. N., Newton E. R., Quinn S. N., Rodriguez J. E., et al., 2020, ApJL, 892, L21.
- 8. TESS Spots a Hot Jupiter with an Inner Transiting Neptune Huang C. X., Quinn S. N., Vanderburg A., Becker J., Rodriguez J. E., et al., 2020, ApJL, 892, L7.
- 9. MASCARA-4 b/bRing-1 b: A retrograde hot Jupiter around a bright A-type star Dorval P., Talens G. J. J., Otten G. P. P. L., Brahm R., Jordán A., et al., 2020, A&A, 635, A60.
- TESS discovery of an ultra-short-period planet around the nearby M dwarf LHS 3844
 Vanderspek R., Huang C. X., Vanderburg A., Ricker G. R., Latham D. W., Seager S., Winn J. N., et al., 2019, ApJL, 871, L24.
- 11. HD2685 b: A Hot-Jupiter orbiting an early F-type star detected by TESS Jones M. I., Brahm R., Espinoza N., Wang S., Shporer A., et al., 2019, A&A, 625, A16.
- HD 202772A b: A Transiting Hot Jupiter around a Bright, Mildly Evolved Star in a Visual Binary Discovered by TESS
 Wang S., Jones M., Shporer A., Fulton B. J., Paredes L. A., Trifonov T., et al., 2019, AJ, 157, 51.

^{**}Variations of my name in literature include: James, H.S., James, H-S, Hodari-Sadiki, J., and Hubbard-James, H.-S.

TEACHING EXPERIENCE

Joint Instructor

Spring 2022 - Present

Georgia State University

Atlanta, GA

- · Co-Lecturer for a Synchronous (Online and In-Person Instruction) Introductory Astronomy Course ASTR 1000 (Introduction to the Universe)
- · Gave twelve (12) lectures over the semester, on topics such as, the Solar System, Astrobiology and Life in the Universe, and Stellar Evolution.

Graduate Teaching Assistant

Aug 2017 - Jul 2021

Georgia State University

Atlanta, GA

- · Instructor for Introductory Astronomy Lab ASTR 1010 (Astronomy of the Solar System) Fall 2017, 2018, 2019, & 2020, Spring 2019, & 2021
- \cdot Instructor for Introductory Astronomy Lab ASTR 1020 (Stellar and Galactic Astronomy) Fall 2020, Spring 2018, & 2020

GRE and SAT Instructor

Jan 2019 -Jan 2020

Educational Testing Consultants/ University of Georgia

Athens, GA

- · Instructor for GRE Test Prep course at the University of Georgia Spring 2019, & Summer 2019
- · Instructor for SAT Test Prep course at the University of Georgia Spring 2019, Summer 2019, & Fall 2020

Graduate Teaching Assistant

Aug 2012 - May 2014

University of Cincinnati

Cincinnati, OH

· Instructor for Biomedical Engineering Labs, Basic Electrical Circuits, & BME Senior Capstone I Fall 2012, & 2013, Spring 2013, & 2014

Lecturer Fall 2013

University of Cincinnati

Cincinnati, OH

· Lecturer for a Basic Electrical Circuits course (BME 3071) in the Biomedical Engineering department at the University of Cincinnati.

RESEARCH EXPERIENCE

Spectral Characterization of K dwarfs

Aug 2017- Present

Advisor: Dr. Todd J. Henry

Atlanta, GA

· Spectroscopic determination of K dwarf stellar properties, including age, activity, metallicity, & temperature using high resolution (R=80,000) CHIRON spectra.

Biomedical Engineer and Research Scientist

Mar 2015 - Nov 2016

Castle Medical

Smyrna, GA

· Lead validation studies of the Golden Gate/InCCA Clinical Chemistry Photo-Analyzers.

Thermo-responsive Polymers for Cell-Based Therapeutic Applications Aug 2012- Dec 2014 Advisor: Dr. Daria Narmoneva Cincinnati, OH

· In-vitro production of intact human cell sheets for improvement of Diabetic Wound healing outcomes.

SERVICE & OUTREACH

CHIRON Data Manager

Georgia State University

Dec 2018 - Present

· Organize, process, and distribute all calibration and scientific data acquired using the CHIRON echelle spectrometer. CHIRON is mounted on the CTIO/SMARTS 1.5m telescope which is operational for upwards of 300 nights per year. Data from CHIRON has been used to publish at least 30 peer-reviewed articles since December 2017.

Grad Life at Georgia State Panalist

Aug 2022

Georgia State University

· Invited as the College of Arts & Sciences representative for a Georgia State University graduate orientation panel discussing life as a grad student.

STEM Hands Summer Camp

Jun 2022

Georgia Outreach Team for Space (GOT Space)

· Presented and Lead activities for a group of ~ 15 high school students who are either deaf or hard of hearing.

NASA Science Activation Planetary ReaCH Workshop

Apr 2022

Arizona State University

 \cdot Participated in a workshop and an outreach event focused on engaging audiences in planetary science and exploration, with an explicit focus on Latinx and Black communities.

Astronomy Curriculum Committee Member

Sept 2021 - Present

Georgia State University

· Graduate student representative on the Physics and Astronomy department's Curriculum Committee that discusses new courses and any changes to the current course catalog.

AstroPal Grad-Student Association

Aug 2020 - Present

Georgia State University

· Mentoring 1st and 2nd year graduate students in the Physics & Astronomy Department.

Hard Labor Creek Observatory Open House

Aug 2017 - Jan 2020

Georgia State University

· Helped set up telescopes for public to view of several astronomical objects during the open house.

Volunteer Lecturer & Mentor

Aug 2015 - Aug 2019

Freedom University

· Math and SAT instructor for students at Freedom University.

MENTORING

Sebastian Carrazco Gaxiola - Graduate Student, Georgia State University.	Aug 2022 - Present
Tim Johns - Graduate Student, Georgia State University.	May 2022 - Present
D. Xavier Lesley - Graduate Student, Southern Connecticut State University.	Jan 2021 - Present
Dan Johns (AstroPal Mentee) - Graduate Student, Georgia State University.	Sep 2020 - May 2022
Andrey Brevett - Undergraduate Student, Berea College.	Aug 2018 - Aug 2022
Edgar Ortiz - High School Student, Freedom University.	Aug 2015 - Aug 2016

PROFESSIONAL AFFILIATIONS

Southern Regional Education Board (SREB)	Aug 2022 - Present
American Astronomical Society (AAS)	Oct 2017 - Present
National Society of Black Physicists (NSBP)	Aug 2021 - Present
Biomedical Engineering Society (BMES)	May 2015 - May 2017

TECHNICAL PROFICIENCY

Programming Language

· Expert: Python, Matlab, bash

· Intermediate Proficiency: IDL, R, HTML/CSS

· Limited Proficiency: C++, Julia

Software and Packages

- · Astronomy: Astropy, IRAF/PyRAF, TOPCAT, DS9
- · Telescope Operation: CTIO 1.5 telescope (computerized), CTIO 0.9 telescope (computerized), Multiple Tripod & Table Top Telescopes (manual)
- · Others: LaTeX, MS Office, Git Repository

NON-REFEREED ABSTRACTS AND CONFERENCE PROCEEDINGS

- Spectroscopic Identification of Young and Active K Dwarfs Within 25 Parsecs
 Hubbard-James, H.-S., Lesley, D.X., Henry, T.J., Paredes, L. A., Nisak, A., 2022, Poster presentation, American Astronomical Society 240th Meeting Abstracts.
- A Kinematic and Spectroscopic Analysis of the Nearest K Dwarfs
 Lesley, D.X., Hubbard-James, H.-S., Henry, T.J., Paredes, L. A., Nisak, A., 2022, Oral presentation, American Astronomical Society 240th Meeting Abstracts.
- 3. Spectroscopic Identification of Young and Active K Dwarfs Within 25 Parsecs **Hubbard-James, H.-S.**, Lesley, D.X., Henry, T.J., Paredes, L. A., Nisak, A., 2022, Oral presentation, 2022 Astrobiology Science Conference (AbSciCon 2022).
- Spectroscopic Identification of Five K Dwarfs Younger than 1 GYR Within 30 parsecs Hubbard-James, H.-S., Lesley, D.X., Henry, T.J., 2021, Oral presentation, 2021 National Society of Black Physicists Conference.
- A Kinematic and Spectroscopic Analysis of the Nearest K Dwarf Stars
 Lesley, D.X., Hubbard-James, H.-S., Henry, T.J., 2021, Oral presentation, 2021 National Society of Black Physicists Conference.
- Solar System Realms: Stars Taking Up Space Where Planets Could Be Henry, T. J., Jao, W., Paredes, L. A., Vrijmoet, E. H., James, H.S., et al., 2021, In: American Astronomical Society Meeting Abstracts.
- A Radial Velocity Survey of the Complete Sample of K Dwarfs within 25 Parsecs.
 Paredes, L. A., Henry, T. J., Jao, W., James, H.S., et al. In: American Astronomical Society Meeting Abstracts. Vol. 53. Jan. 2021, p. 332.02