HODARI-SADIKI HUBBARD-JAMES

hodarijamesastro@gmail.com ◇ www.astro.gsu.edu/∼james
Department of Physics and Astronomy, Georgia State University
25 Park Place, 615 ◇ Atlanta, GA 30302

EDUCATION

Ph.D. in Astronomy — *Spring 2023 (Expected)*
Georgia State University — Atlanta, GA

M.S. in Physics with Astronomy Concentration — *2020*
Georgia State University — Atlanta, GA

M.S. in Biomedical Engineering — *2014*
University of Cincinnati — Cincinnati, OH

B.A. in Physics minor Biology — *2012*
Berea College — Berea, KY

WORK EXPERIENCE

Graduate Teaching/Research Assistant — Aug 2017 - Present
Georgia State University — *Atlanta, GA*

CHIRON Data Manager, CTIO/SMARTS 1.5m — Dec 2018 - Present
Georgia State University — *Atlanta, GA*

GRE and SAT Instructor — Jan 2019 -Jan 2020
Educational Testing Consultants/University of Georgia — *Athens, GA*

Lab Technologist — Mar 2017 - Aug 2017
Labsolutions — *Atlanta, GA*

Biomedical Engineer — Mar 2015 - Dec 2016
Castle Medical — *Smyrna, GA*

Graduate Teaching/Research Assistant — Aug 2012 - Dec 2014
University of Cincinnati — *Cincinnati, OH*

REFEREED PUBLICATIONS

1. The Solar Neighborhood L: Spectroscopic Discovery of K Dwarfs Younger than 1 Gyr and New Binaries within 30 Parsecs
   Hubbard-James, H., Lesley, D.X., Henry, T.J., et al., 2022, In Press.
2. The Solar Neighborhood XLVIII: Nine Giant Planets Orbiting Nearby K Dwarfs, and the CHIRON Spectrograph's Radial Velocity Performance.
   Paredes, L., Henry, T., Quinn, S., ... **James, H.**, et al., 2021, ApJ, 162, 176.
3. TESS discovery of an ultra-short-period planet around the nearby M dwarf LHS 3844
   Vanderspek, R., Huang, C.X., Vanderburg, A., ... **James, H.**, et al. 2019, Apjl, 871, L24.

TEACHING EXPERIENCE

Joint Instructor Spring 2022
Georgia State University *Atlanta, GA*

· Co-Lecturer for a Synchronous (Online and In-Person Instruction) Introductory Astronomy Course ASTR 1000 (Introduction to the Universe)

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

· 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

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 2012-2014
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 Dec 2018 - Present
Georgia State University

· 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.

AstroPal 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.

NON-REFEREED ABSTRACTS AND CONFERENCE PROCEEDINGS

1. Spectroscopic Identification of Five K Dwarfs Younger than 1 GYR Within 30 parsecs
Hubbard-James, H., Lesley, D.X., Henry, T.J., 2021, Oral presentation, 2021 National Society of Black Physicists Conference.
2. A Kinematic and Spectroscopic Analysis of the Nearest K Dwarf Stars
Lesley, D.X., **Hubbard-James, H.**, Henry, T.J., 2021, Oral presentation, 2021 National Society of Black Physicists Conference.
3. Solar System Realms: Stars Taking Up Space Where Planets Could Be
Henry, T. J., Jao, W., Paredes, L. A., Vrijmoet, E. H., **James, H.**, et al., 2021, In: American Astronomical Society Meeting Abstracts.
4. A Radial Velocity Survey of the Complete Sample of K Dwarfs within 25 Parsecs.
Paredes, L. A., Henry, T. J., Jao, W., **James, H.**, et al. In: American Astronomical Society Meeting Abstracts. Vol. 53. Jan. 2021, p. 332.02
5. Constructing a Spectral Rubric for Estimating the Age and Activity of K Dwarfs within the Solar Neighborhood
James, H., Henry, T. J., Paredes, L., Nisak, A., Jao, W., Hinojosa-Goñi, R., Aviles, R., 2020, In: American Astronomical Society Meeting Abstracts. Vol. 52.

GRANTS, SCHOLARSHIPS AND AWARDS

Graduate Student Scholarship 2020
Georgia State University Alumni Association

Most Inspirational Alumnus Award 2016
Berea College African Students Association

University of Cincinnati SEED Grant recipient 2014
University of Cincinnati

Waldemar Noll Prize in Physics 2012
Berea College

MENTORING

D. Xavier Lesley - Grad Student, Southern Connecticut State University. Spring 2021 - Present
Dan Johns (AstroPal Mentee) - Grad Student, Georgia State University. Fall 2020 - Present
Chukwuemeka Chikelu - Grad Student, University of Cincinnati. Summer 2014- Summer 2015

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

PROFESSIONAL AFFILIATIONS

American Astronomical Society (AAS)	Oct 2017 - Present
National Society of Black Physicists (NSBP)	Aug 2021 - Present
Biomedical Engineering Society (BMES)	May 2015 - May 2017