Education

Georgia State University Atlanta GA

PH.D. IN ASTRONOMY Aug. 2011 - Aug. 2018

• Dissertation: Fundamental Properties of O and B Stars with Optical Interferometry

Fayetteville, AR

Johnson City, TN

Aug. 2003 - May 2005

Summer of 2004

M.S. IN PHYSICS

University of Arkansas

Aug. 2005 - Aug. 2007

• Thesis: Absolute Properties of Eclipsing Binary Star VZ Cep

Guilford College Greensboro, NC

B.S. IN PHYSICS Aug. 2001 - May 2005

• Thesis: Micro-variability in Post-AGB Stars

Experience.

Agnes Scott College Decatur, GA

TEACHING POSTDOCTORAL ASSOCIATE Aug. 2018 - present

- · Courses: The Solar System, Galaxies and Cosmology, Problem Solving for Physics, Intermediate Observational Techniques, Mathematical Methods for Physics and Engineering
- · Taught introductory astronomy lecture and lab.
- Taught introductory calculus based physics lecture.

Georgia State University Atlanta, GA

GRADUATE ASSISTANT Aug. 2011 - July 2018

- Taught introductory astronomy lab, graded labs, gave lectures on lab
- Helped run observatory open houses.
- · Conducted stellar astronomy research, used existing code and developed new codes to analyze data.

Georgia State University Atlanta, GA Oct. 2012 - Jan. 2107 HARD LABOR CREEK OBSERVATORY FELLOW

• Scheduled and coordinated all open houses for the year, trained new students on equipment and helped with class observing projects.

Coastal Carolina University Conway, SC

Aug. 2007 - May 2011 LECTURER OF PHYSICS • Courses: Science of the Physical World, Essentials of Physics I, Essentials of Physics II, General Physics II, Conceptual Astronomy Lab

- Instructor for introductory science courses for non-science majors and algebra and calculus based introductory physics courses. Co-instructor for introductory science course for science majors.
- Developed lecture material, homework, labs and exams and helped teach and coordinate co-requisite lab. Facilitated and answered questions during group problem solving sessions and labs.

University of Arkansas Favetteville, AR

Aug. 2005 - May 2007 TEACHING ASSISTANT

• Taught introductory astronomy lab, created quizzes, graded labs, gave lecture on lab, and helped students.

• Research: Variability in Post-AGB Stars

RESEARCH ASSISTANT

OBSERVATORY ASSISTANT

- Calibrated and reduced raw CCD images, creating light curves, and analyzed data.
- · Gave poster and power-point presentation on results.

SARA REU, East Tennessee State University

Guilford College Greensboro, NC

• Held open houses for the public once a month.

• Operated and maintained the school's 16-inch telescope and CCD camera.

Presentations & Posters

2018 CHARA Instrumentation and Science Meeting

Angular Diameters and Effective Temperatures of O- and B-type Stars

Paris, France

March 2018

CHARA Science Meeting

FUNDAMENTAL PROPERTIES OF O- AND B-TYPE STARS

Pasadena, CA March 2017

CHARA Year Eleven Science Review

FUNDAMENTAL PROPERTIES OF O- AND B-TYPE STARS

Atlanta, GA March 2015

IAU 307: New Windows on Massive Stars

FUNDAMENTAL PROPERTIES OF O- AND B-TYPE STARS

Geneva, Switzerland

June 2014

VLTI School: High angular resolution for stellar astrophysics

FUNDAMENTAL PROPERTIES OF O- AND B-TYPE STARS

Barcelonnette, France

Sep. 2013

CHARA/NPOI Collaboration Meeting

FUNDAMENTAL PROPERTIES OF O- AND B-TYPE STARS

Flagstaff, AZ

March 2013

Publications.

- Gordon, K. D., Gies, D. R., Schaefer, G. H., et al. 2018, ApJ, 869, 37
- White, T.R., Pope, B.J.S., Antoci, V., et al. 2017, Beyond the Kepler/K2 bright limit: variability in the seven brightest members of the Pleiades, MNRAS, 471, 2882
- Richardson, N.D., Shenar, T., Roy-Loubier, O., et al. 2016, The CHARA Array resolves the long-period Wolf-Rayet binaries WR 137 and WR 138, MNRAS, 461, 4115
- Richardson, N.D., Moffat, A.F.J., Maltais-Tariant, R., et al. 2016, Spectroscopy, MOST photometry, and interferometry of MWC 314: is it an LBV or an interacting binary?, MNRAS, 455, 244
- Gordon, K., Gies, D., & Schaefer, G. 2015, Angular Diameters of O- and B-type Stars, New Windows on Massive Stars, 307, 293
- Richardson, N.D., Moffat, A.F.J., Maltais-Tariant, R., et al. 2014, MWC 314: binary results from optical interferometry compared with spectroscopy and photometry, in Proc. SPIE, 9146, 91460G

Honors & Awards

INTERNATIONAL

2013 Travel Grant, IAU 307: New Windows on Massive Stars

Geneva, Switzerland

2013 **Travel Grant**, Fizeau exchange visitors program to attend the VLTI School

Barcelonnette,

France

DOMESTIC

2013-2108 NASA Georgia Space Grant Fellowhip, Georgia State University

Atlanta, GA

2005 **Departmental Honors**, Physics Department, Guilford College

Greensboro, NC

2005 **Academic Honors,** Guilford College

Greensboro, NC

2003 **Sigma Pi Sigma**, National Physics Honor Society

Greensboro, NC



Programming MATLAB, IDL, IRAF, LitPro, MaxImDL, CCDOPS, LTEX

Operating Systems Windows, Macintosh, Linux

Observational Interferometry, differential photometry, spectroscopy