# **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

**University of Arkansas** Fayetteville, AR

M.S. IN PHYSICS 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 taught: The Solar System, Galaxies and Cosmology, Problem Solving for Physics, Intermediate Observational Techniques, Mathematical Methods for Physics and Engineering, Introductory Physics I, Modern Physics, (Planned for Spring 2021 Introductory Physics II, Introduction to General Relativity)
- Developed lecture material, homework, labs and exams.
- Emphasized team-based and active learning inside and outside of the classroom.
- · Guided students in independent work during the semester on ongoing research in optical interferometry.
- Mentored summer research students and guided independent projects based on astronomical observation and data analysis.

**Georgia State University** Atlanta, GA

Aug. 2011 - July 2018 **GRADUATE ASSISTANT** 

- 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

HARD LABOR CREEK OBSERVATORY FELLOW

Oct. 2012 - Jan. 2017

Johnson City, TN

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

Conway, SC **Coastal Carolina University** 

LECTURER OF PHYSICS Aug. 2007 - May 2011 • Courses taught: 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** Fayetteville, AR

TEACHING ASSISTANT Aug. 2005 - May 2007

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

RESEARCH ASSISTANT Summer of 2004

- Research: Variability in Post-AGB Stars
- · 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

**OBSERVATORY ASSISTANT** Aug. 2003 - May 2005

- Held open houses for the public once a month.
- Operated and maintained the school's 16-inch telescope and CCD camera.

# **Presentations & Posters**

### 2019 CHARA Science Meeting

Angular Diameters and Effective Temperatures of B stars - Results!

Flagstaff, AZ

March 2019

### 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

Ireland

Ireland Geneva,

**France** 

# **Publications**

- Gordon, K. D., Gies, D. R., Schaefer, G. H., Huber, D., & Ireland, M. 2019, ApJ, 873, 91
- 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

Ballyconnell, AAS International Travel Grant, IAU 361: Massive Stars Near and Far (postponed due to COVID-19) 2020 Ballyconnell, IAU Travel Grant, IAU 361: Massive Stars Near and Far (postponed due to COVID-19) 2020 2013 IAU Travel Grant, IAU 307: New Windows on Massive Stars Switzerland Barcelonnette. 2013 Travel Grant, Fizeau exchange visitors program to attend the VLTI School

# **DOMESTIC**

2013-2018 NASA Georgia Space Grant Fellowhip, Georgia State University

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

2005 **Academic Honors**, Guilford College

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

Atlanta, GA Greensboro, NC Greensboro, NC Greensboro, NC

# Skills\_

ProgrammingIDL, LitPro, MaxImDL, শEXOperating SystemsWindows, Macintosh, Linux

**Observational** Interferometry, differential photometry, spectroscopy