

KATHRYN V. LESTER

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Department of Physics & Astronomy

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EDUCATION

- Georgia State University** - Ph.D candidate, Astronomy *August 2014 - Present*
- M.S. Physics, Astronomy concentration *Fall 2017*
- Lehigh University** - B.S. Astrophysics *May 2014*

RESEARCH EXPERIENCE

Research Assistant at Georgia State University *August 2014 - Present*

- Advisor: Dr. Doug Gies
- Visual and spectroscopic orbits of A and F type stars in spectroscopic binaries
- A photometric and spectroscopic analysis of K2 eclipsing binaries, BW Aqr and EPIC 202062176.

Undergraduate Research Assistant at Lehigh University *August 2013 - May 2014*

- Advisor: Dr. Ginny McSwain
- Fit model spectra to binary stars in the Cyg OB2 association to determine T_{eff} , $\log g$, and $V \sin i$.

REU Research Assistant at the University of Wyoming *Summer 2013*

- Advisor: Dr. Chip Kobulnicky
- Measured and analyzed the radial velocity shift of WIRO spectra in search of massive binary stars.

REFEREED PUBLICATIONS

To see my publication record on SAO/NASA ADS, *click here*.

4. "A Young Eclipsing Binary and its Luminous Neighbors in Sh 2-252E". **K. V. Lester**, D. R. Gies, Z. Guo. 2016, AJ, 152, 194.
3. "A Low-mass Black Hole in the Nearby Seyfert Galaxy UGC 06728" M. C. Bentz, M. Batista, J. Seals, K. Garcia, R. Kuzio de Naray, W. Peters, M. D. Anderson, J Jones, **K. V. Lester**, et al. 2016, ApJ, 831, 2
2. "Kepler Eclipsing Binaries with Stellar Companions". D. R. Gies, R. A. Matson, Z. Guo, **K. V. Lester**, J. A. Orosz, G. J. Peters. 2015, AJ, 150, 178
1. "Toward Complete Statistics of Massive Binary Stars: Penultimate Results from the Cygnus OB2 Radial Velocity Survey". H. A. Kobulnicky, D. C. Kiminki, M. J. Lundquist, J. Burke, J. Chapman, E. Keller, **K. V. Lester**, et al. 2014, ApJS, 213, 34

OBSERVING EXPERIENCE

CHARA array

6 1m telescopes. Mt. Wilson, CA

12 nights - Interferometric observations of binary stars using CLIMB

Apache Point Observatory

3.5m telescope. Sunspot, NM

17 nights - Echelle spectroscopy of binary stars using ARCES

Wyoming Infrared Observatory

2.3m telescope. Mt. Jelm, WY

15 nights - Longslit spectroscopy of binary star candidates

Hard Labor Creek Observatory

0.6m telescope. Rutlege, GA

7 nights - Photometry of eclipsing binaries and AGN

CONFERENCE POSTERS

1. "Photometric & Spectroscopic Analysis of EPIC 202062176". **Lester, K. V.**, Gies, D. R., Guo, Z., Presented at the 227th AAS Meeting in 2016.
2. "The Cygnus OB2 Radial Velocity Survey: Three new massive binaries MT216, MT234, MT485". **Lester, K. V.**, et al., Presented at the 223rd AAS Meeting in 2014.

TEACHING EXPERIENCE

Lab Instructor at Georgia State University

August 2014 - present

- Teach and grade weekly introductory astronomy labs, ASTR 1010/1020. (Total labs taught: 16)

Grading Assistant at Lehigh University

Spring 2014

- Grade online homework and exams for introductory astronomy course.

OUTREACH EXPERIENCE

Solar Eclipse Event

August 21, 2017

- Operated solar telescopes during a solar eclipse viewing party in Rabun Gap, GA.

Girl Scout Workshop

September 2014, October 2017

Atlanta, GA

- Assisted with workshop activities, including building pinhole cameras.

Hard Labor Creek Observatory Volunteer

September 2014 - present

- Operate telescopes and answer questions from the public during monthly open houses.

Urban Life Observatory Volunteer

August 2014 - May 2017

- Operate telescopes during observing night for astronomy lab students on-campus.

Workshop Volunteer

May 2015

IAU Symposium 314

- Assisted with workshop for local high school students building cereal box spectrographs.

APPLICABLE SKILLS

High Proficiency	IDL, IRAF, Microsoft Office, Windows, Mac OS X, Linux, L ^A T _E X,
Basic Proficiency	Python, PyKE, DS9, Period04, Photoshop
Foreign Languages	French (intermediate proficiency)