

Tabetha Suzanne Boyajian

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Current Position:

- Astronomy graduate student, Georgia State University, Atlanta, GA

Education:

- PhD Graduate Student, Astronomy, Georgia State University, Advisor: Hal McAlister
- Masters in Science, Astronomy, Georgia State University, Completed May 2005
- Bachelor in Science, Physics with Concentration in Astronomy, College of Charleston, Completed May 2003

Areas of Specialization and Interest:

- Optical interferometry, stellar diameters, stellar spectroscopy, binary stars, astrometry, fundamental properties of stars

Research Experience:

- Doctoral:
 - Optical interferometry of single and binary stars
- Masters:
 - Optical spectroscopy of early-type binary stars
- Undergraduate:
 - UV spectroscopy of late-type binary stars
 - Refurbishing and maintenance of 0.4 meter telescope at College of Charleston
 - Development of software tools for robotic observations on 0.5m telescope located at University of Virgin Islands

Teaching Experience:

- Teaching Assistant, Introductory Astronomy Laboratory, Georgia State University, 8/03-Present. Lectured and demonstrated new techniques, graded laboratory assignments. Contact: Dr. John Wilson, Department of Physics and Astronomy
- Teaching Assistant, Introductory Astronomy Laboratory, College of Charleston, 8/00-5/03. Demonstrated laboratory techniques and assisted students in laboratory routines. Contact: Dr. John Hakkila, Department of Physics and Astronomy
- Tutor in Mathematics, Physics, and Astronomy

Refereed Publications:

1. **Boyajian, T. S.**, & McAlister, H. A., “Angular Diameters of Hyades Giants with the CHARA Array”, (in preparation)
2. **Boyajian, T. S.**, Mc Alister, H. A., Baines, E. K., Gies, D. R., Henry, T., Jao, W., O'Brien, D., Raghavan, D., Touhami, T., ten Brummelaar, T. A., Farrington, C., Goldfinger, P. J., Sturmann, L., Sturmann, J., Turner, N., H., & Ridgway, S. 2007, “Angular Diameters of the G Subdwarf μ Cassiopeiae A and the K Dwarfs σ Draconis and HR 511 from Interferometric Measurements with the CHARA Array”, to appear in the *The Astrophysical Journal*, August 2008
3. **Boyajian, T. S.**, Gies, D. R., Dunn, J. P., Farrington, C. D., Grundstrom, E. D, Huang, W., McSwain, M. V., Williams, S. J., Wingert, D. W., Fullerton, A. W., & Bolton, C. T. 2007, “The Long-Period, Massive Binaries HD 37366 and HD 54662: Potential Targets for Long-Baseline Optical Interferometry”, *The Astrophysical Journal*, 664, 1121
4. **Boyajian, T. S.**, Gies, D. R., Baines, E. K., Barai, P., Grundstrom, E. D., McSwain, M.V., Parks, J. R., Riddle, R. L., Ryle, W. T., & Wingert, D.W. 2007, “Radial Velocities of Six OB Stars”, *The Publications of the Astronomical Society of the Pacific*, 119, 742
5. Grundstrom, E. D., **Boyajian, T. S.**, Finch, C., Gies, D. R., Huang, W., McSwain, M. V., O'Brien, D. P., Riddle, R. L., Trippe, M. L., Williams, S. J., Wingert, D. W., & Zaballa, R. A. 2007, “Joint H-alpha and X-ray Observations of Massive X-ray Binaries III. The Be X-ray Binaries HDE 245770 = A 0535 +26 and X Persei”, *The Astrophysical Journal*, 660, 1398
6. McSwain, M. V., Ransom, S. M., **Boyajian, T. S.**, Grundstrom, E. D., & Roberts, M. S. E. 2007, “Runaway Massive Binaries and Cluster Ejection Scenarios”, *The Astrophysical Journal*, 660, 740
7. McSwain, M. V., **Boyajian, T. S.**, Grundstrom, E. D., & Gies, D. R. 2007, “A Spectroscopic Study of Field and Runaway OB Stars”, *The Astrophysical Journal*, 655, 473
8. **Boyajian, T. S.**, Gies, D. R., Helsel, M. E., Kaye, A. B., McSwain, M. V., Riddle, R. L., & Wingert, D. W, 2006, “The B-Supergiant Components of the Double-Lined Binary HD1383”, *The Astrophysical Journal*, 646, 1209
9. **Boyajian, T. S.**, Beaulieu, T. D., Gies, D. R., Grundstrom, E., Huang, W., McSwain, M. V., Riddle, R. L., Wingert, D. W., & De Becker, M. 2005, “The Massive Runaway Stars HD14633 and HD15137”, *The Astrophysical Journal* ,621, 978

Abstracts and Presentations:

1. **Boyajian, T. S.**, McAlister, H. A. 2008, “The First Direct Measurement to the Diameter of a Population II Star; Observationally Determined Fundamental Properties of μ Cas A with the CHARA Array”, *American Astronomical Society Meeting* (AAS#211, 57.15)
2. **Boyajian, T. S.** 2006, “The Runaway Stars HD 14633 and HD 15137”, Georgia Regional Astronomers Meeting, invited talk
3. McSwain, M. V., **Boyajian, T. S.**, Grundstrom, E., Gies, D. R. 2005, “A Search for Quiet Massive X-ray Binaries”, *American Astronomical Society Meeting* (AAS#207, 114.02)

4. **Boyajian, T. S.**, Neff, J. E., Woehrman, M. E. 2003, “Ultraviolet Spectral Images of EI Eri and HD 199178”, *American Astronomical Society Meeting (AAS#202, 32.04)*
5. Neff, J. E. et al. 2004, “The Virgin Islands telescope: history and status”, *Astronomische Nachrichten*, 325, 669

Professional Affiliations:

- Society of Physics Students (SPS) member since 2000
- American Astronomical Society (AAS) sponsored member since 2003

Research Grants:

- South Carolina Space Grant Consortium: ‘Development of an Automated and Remote 0.5m Telescope at Etelman Observatory at the University of the Virgin Islands’
- IUE--NASA undergraduate research grant:
 - o ‘Spectral Imaging of EI Eridani’ (RSKFW)
 - o ‘An IUE Archive Search for Doppler Imageable Chromospheres in Active Stars’ (RSHDG)

Honors:

- Recipient, Outstanding Advanced Graduate Student Award, GSU College of Arts and Sciences Honors Program, April 2008
- Recipient, Outstanding Graduate Assistant Teaching Award, GSU Center for Teaching and Learning, and GSU College of Arts and Sciences Honors Program, April 2006
- Recipient, Departmental Honors in Physics, College of Charleston, May 2003
- Recipient, Golden Key National Honors Society

Qualifications:

- Really nice, cool, and smart person

Grants and Study Abroad/Travel:

- American Astronomical Society (AAS) meeting, Winter 2008, Full financial support granted
- Yale Astrometry Workshop, Yale University, Summer 2005, Full financial support granted
- Michelson Summer Workshop (MSW), Caltech, Summer 2005, Summer 2006, Full financial support granted
- American Astronomical Society (AAS) meeting, Summer 2003, Full financial support granted
- United States Particle Accelerator School (USPAS), Yale University, Summer 2002, Full financial support granted

References:

- Hal McAlister, Ph.D.

- o Regents' Professor, Georgia State University; Director, Center for High Angular Resolution Astronomy, Georgia State University; Director & Chief Executive Officer, Mount Wilson Institute, Pasadena, California, 404-413-5400, hal@chara.gsu.edu
- Douglas Gies, Ph.D.
 - o Graduate Director, Department of Physics and Astronomy, Georgia State University, Atlanta, GA 30303, 404-413-6021, gies@chara.gsu.edu
- James Neff, Ph.D.
 - o Associate Professor, Department of Physics and Astronomy, College of Charleston, Charleston, SC 29464, 843-953-5325, neffj@cofc.edu