

Stephen J. Williams

United States Citizen

Institute of Astronomy, Astrophysics, Space
Applications and Remote Sensing
National Observatory of Athens
I. Metaxa & Vas. Pavlou St.
Penteli, Athens GR-15236 GREECE
+30 210 810 9177
williams@noa.gr

Education

Ph.D. Astronomy	Georgia State University	2011
Advisor: Dr. Douglas R. Gies	Thesis: <i>Optical Spectroscopy of Massive Binary Stars</i>	
M.S. Physics	Georgia State University	2007
M.S. Astronomy	San Diego State University	2004
Advisor: Dr. Allen W. Shafter	Thesis: <i>On the Nova Rate in the Galaxy M33</i>	
B.S. Astronomy	San Diego State University	2001

Positions Held

Postdoctoral Researcher	2013–present
IAASARS, National Observatory of Athens, Greece Analyzed archival <i>Spitzer Space Telescope</i> images to determine the massive stellar content of nearby galaxies	
Research Associate	2011–2012
Department of Physics & Astronomy, Georgia State University, USA Performed spectroscopic observations and analysis in support of a NASA Kepler Guest Observer program	
Graduate Research Assistant	2005–2011
Department of Physics & Astronomy, Georgia State University, USA Conducted spectroscopic and photometric research on massive binary systems	
Graduate Teaching Assistant	2004–2008
Department of Physics & Astronomy, Georgia State University, USA Taught intro astronomy labs to 15 sections of 5–25 students Solely responsible for lecture course of one section of 45 students	
Research Assistant	1999–2004
Astronomy Department, San Diego State University, USA Conducted observations and research at Mount Laguna Observatory on cataclysmic variable binary systems and extragalactic novae	
Lead Teaching Associate	2004
Astronomy Department, San Diego State University, USA Taught intro astronomy labs, oversaw scheduling, TA meetings, maintained equipment, and organized “Inner Space, Outer Space” public nights	

Astronomy Instructor 2002–2003
Astronomy Department, San Diego State University, USA
Taught intro astronomy lecture to two sections of 55–60 students, solely responsible for developing lectures and exams

Teaching Associate 2001–2002
Astronomy Department, San Diego State University, USA
Taught intro astronomy labs to 5 sections of 15–24 students

Teaching Experience

Astronomy 1010 (Planets) and 1020 (Stars & Galaxies) labs 2004–2008
Astronomy 1020 (Stars & Galaxies) lecture 2007
Astronomy 101 (Universe in a Semester) labs 2001–2004
Astronomy 101 lectures 2002–2003

Students Mentored

Sissy Angelitsi, Aristotle University of Thessaloniki 2014
Project: *Photometry of Abell Clusters*
Melissa Hursey, Georgia State University 2009
Project: *Astrometric Measurements of Neglected Double Stars*
John W. Helsel, Department of Physics, Furman University 2008
Project: *Eclipsing Binaries in the All Sky Automated Survey*

Observing Experience

Helmos Observatory, Greece 2013–2014
2.3-meter Aristarchos Telescope with direct imager, 8 nights
Lowell Observatory, Anderson Mesa, Arizona 2009–2012
31-inch Telescope with NASACam CCD, 2 nights
72-inch Perkins Telescope with DeVeny Spectrograph, 19 nights
Kitt Peak National Observatory, Arizona 2006–2012
0.9-m Coudé Feed Telescope with Spectrograph, 30 nights
4.0-m Mayall Telescope with RC Spectrograph, 22 nights
Gemini North Observatory, Mauna Kea, Hawaii 2009
NIFS, 1 night
Cerro Tololo Inter-American Observatory, Chile 2008 & 2009
0.9-m Telescope with 2K optical imager, 5 nights
4.0-m Blanco Telescope with RC Spectrograph, 5 nights
Mount Laguna Observatory, California 1999–2004
1.0-m Telescope with CCD 2000 and CCD 2001, 40 nights
Smith 24-inch Telescope with PMT, 10 nights

Public Outreach

Hard Labor Creek Observatory	2004–2012
Co-hosted 8 public open houses	
Georgia Science Olympiad	2005 & 2006
Co-developed and managed Astronomy events for 7 th and 8 th graders	
Project ASTRO, San Diego	2000 & 2001
Performed in-classroom astronomy demonstrations to 5 classes of 20–30 6 th and 7 th grade students	
Mount Laguna Observatory’s 21-inch Buller Visitor’s Telescope	1999–2003
Participated in over 50 public nights, for academic and public audiences	

Awards

Outstanding Advanced Graduate Student Award	2009
Outstanding Second Year Graduate Student Award	2007
Ruth and Clifford Smith Graduate Fellowship	2002 & 2003
Awona W. Harrington Award for Service	2001
William F. Lucas/San Diego Astronomy Association Scholarship	1999 & 2000

Selected Talks

1. Invited Talk, Kopal 2014 Conference, Sept. 9th, 2014, *What Massive Binaries Are Telling Us* (Litomyšl, Czech Republic)
2. Contributed Talk, Science Results from PAN-STARRS1 Conference, June 23rd, 2014, *Dusty Massive Evolved Stars in the Nearby Universe* (Space Telescope Science Institute, Baltimore, Maryland)
3. Invited Talk, Academy of Athens, May 13th, 2014, *The Massive Stellar Content of M83 as Revealed by Spitzer* (Athens, Greece)

Selected Publications

1. **Williams, S. J.**, Gies, D. R., Norris, R. P., et al., *Radial Velocities of Galactic O-type Stars. III. Spectroscopic Binaries with Indications of a Companion*, in prep.
2. **Williams, S. J.**, Bonanos, A. Z., Whitmore, B. C., et al., *The Infrared Massive Stellar Content of M83*, 2015, arXiv:1503:05942, *Astronomy & Astrophysics*, in press
3. **Williams, S. J.**, Gies, D. R., Hillwig, T. C., et al., *Radial Velocities of Galactic O-type Stars. II. Single-lined Spectroscopic Binaries*, 2013, *AJ*, 145, 29
4. **Williams, S. J.**, Gies, D. R., Hillwig, T. C., et al., *Radial Velocities of Galactic O-type Stars. I. Short-term Constant Velocity Stars*, 2011, *AJ*, 142, 146
5. **Williams, S. J.**, Gies, D. R., Helsel, J. W., et al., *ASAS Light Curves of Intermediate-Mass Eclipsing Binary Stars and the Parameters of HI Mon*, 2011, *AJ*, 142, 5

6. **Williams, S. J.**, Gies, D. R., Matson, R. A., et al., *The Be Star HD 215227: A Candidate Gamma-ray Binary*, 2010, ApJL, 723, L93
7. **Williams, S. J.**, Wilson, J. W., Hursey, M., et al., *Astrometric Observations of WDS Neglected Binary Stars*, 2010, Journal of Double Star Observations, Vol. 6, No. 1, January 1, 2010, p. 15
8. **Williams, S. J.**, Gies, D. R., Matson, R. A., et al., *The Evolutionary State of the Massive Interacting Binary BD+36°4063*, 2009, ApJL, 696, L137
9. **Williams, S. J.**, *System Parameters for the Eclipsing B-Star Binary HD 42401*, 2009, AJ, 137, 3222
10. **Williams, S. J.**, Gies, D. R., Henry, T. J., et al., *Dynamical Masses for the Large Magellanic Cloud Massive Binary System [L72] LH 54-425*, 2008, ApJ, 682, 492
11. **Williams, S. J.** & Shafter, A. W., *On the Nova Rate in M33*, 2004, ApJ, 612, 867
12. Kourniotis, M. et al., (including **Williams, S. J.**), *Accurate Fundamental Parameters and Distance to a Massive Early-type Eclipsing Binary in the Danks 2 Cluster*, 2015, in prep.
13. Aldoretta, E. J. et al., (including **Williams, S. J.**), *The Multiplicity of Massive Stars: A High Angular Resolution Survey with the HST Fine Guidance Sensor*, 2015, AJ, 149, 26
14. Gies, D. R., **Williams, S. J.**, Matson, R. A., et al., *A Search for Hierarchical Triples using Kepler Eclipse Timing* 2012, AJ, 143, 137
15. Richardson, N. D., Gies, D. R., **Williams, S. J.**, *A Binary Orbit for the Massive, Evolved Star HDE 326823, a WR+O System Progenitor*, 2011, AJ, 142, 201
16. Touhami, Y., Richardson, N. D., Gies, D. R., et al. (including **Williams, S. J.**), *Spectral Energy Distributions of Be and Other Massive Stars*, 2010, PASP, 122, 379
17. Raghavan, D., McAlister, H. A., Torres, et al. (including **Williams, S. J.**), *The Visual Orbit of the 1.1 Day Spectroscopic Binary σ^2 Coronae Borealis from Interferometry at the Chara Array*, 2009, ApJ, 690, 394
18. Boyajian, T. S., Gies, D. R., Dunn, J. P, et al. (including **Williams, S. J.**), *The Long-Period, Massive Binaries HD 37366 and HD 54662: Potential Targets for Long-Baseline Optical Interferometry*, 2007, ApJ, 664, 1121
19. Grundstrom, E. D., Boyajian, T. S., Finch, C., et al. (including **Williams, S. J.**), *Joint H α and X-ray Observations of Massive X-ray Binaries III. The Be X-ray Binaries HDE 245770 = A 0535 +26 and X Persei*, 2007, ApJ, 660, 1398
20. Grundstrom, E. D., Caballero-Nieves, S. M., Gies, D. R., et al. (including **Williams, S. J.**), *Joint H α and X-ray Observations of Massive X-ray Binaries II. The Be X-Ray Binary and Microquasar LS I +61 303*, 2007, ApJ, 656, 437