

# Samantha Scibelli

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**EDUCATION:** Ph.D Student, University of Arizona, Tucson AZ  
Stony Brook University, Stony Brook, NY  
*Women in Science and Engineering (WISE) Scholar*  
*Bachelors of Science, Physics, second major Astronomy*  
*Study Abroad, Rome, Italy, Summer 2014*  
Anticipated Graduation: 22'  
Graduation: January 21, 2017  
GPA: 3.71/4.00 (*Magna Cum Laude*)

**COMPUTER SKILLS:** Python, IRAF, Ds9, LaTeX, Gnuplot, HTML, Mathematica, Fortran, C++

**RESEARCH:** **NASA Jet Propulsion Laboratory (JPL), Astrophysics Department** *Pasadena, CA*  
*NASA UI Intern* *Jan 2017 – May 2017*

- Awarded \$9,600 Sally Ride Fellowship to return to JPL to begin a project on star formation

**Harvard-Smithsonian Center for Astrophysics** *Cambridge, MA*  
*NSF REU Intern* *June 2016 – Aug 2016*

- Awarded \$5,000 stipend to work as an undergraduate research intern probing infrared dark clouds in the Inner Milky Way

**NASA Jet Propulsion Laboratory (JPL), Astrophysics Department** *Pasadena, CA*  
*NASA UI Intern* *Aug 2015 – Dec 2015*

- Awarded \$9,600 stipend to work as an intern analyzing and modeling jet streams ejected from a dying sun-like star

**Stony Brook University, Physics and Astronomy Department** *Stony Brook, NY*  
*Undergraduate Researcher* *Dec 2014 – Jan 2017*

- Constructed project modeling the kinematics and gravitational lensing properties of spiral galaxies

*Exploration in STEM Researcher* *June 2015 – Aug 2015*

- Awarded \$4,000 grant to continue gravitational lensing research during the summer

**Stony Brook University, Laser Teaching Center** *Stony Brook, NY*  
*Undergraduate Researcher* *Feb 2014 – May 2014*

- Conducted an instructional research project demonstrating gravitational lensing using a wine glass

*Summer Research Intern* *July 2013 – Aug 2013*

- Given \$4,000 stipend to study the evolution of caustic patterns formed by evaporating water droplets

**Rensselaer Polytechnic Institute, Physics and Astronomy Department** *Troy, NY*  
*Visiting Student Researcher* *Nov 2010 – Aug 2014*

- Analyzed over 10,000 spectra by eye in the Sloan Digital Sky Survey
- Awarded a scholarship of \$7,500 as an INTEL Science Talent Search 2013 finalist

## Publications:

- [1] Sahai, R., Scibelli, S., & Morris, M. R. *High-speed Bullet Ejections during the AGB-to-Planetary Nebular Transition: HST Observations of the Carbon Star, V Hydrae*, 2016, ApJ, 827, 92.
- [2] Scibelli, S., Newberg, H. J., Carlin, J.L., & Yanny, B. *Census of Blue Stars in SDSS DR8*, 2015, VizieR Online Data Catalog, 221
- [3] Scibelli, S., Newberg, H. J., Carlin, J.L., & Yanny, B. *Census of Blue Stars in SDSS DR8*, 2014, ApJS, 215, 24

## In Preparation:

Scibelli, S., Sahai, R., Morris, M.R. *Modeling the High-Velocity Bullets From V Hya*, 2018

**In the Press:**

“Hubble Detects Giant ‘Cannonballs’ Shooting from Star”

Link: <http://www.jpl.nasa.gov/news/news.php?feature=6639>

“Getting Girls Involved in Science”

Link: <http://blogs.intel.com/csr/2013/03/getting-girls-involved-in-science/>

**Talks:**

“Physical Properties of Free-Floating Evaporating Gas Globules (FrEGGs) in the W5 Star Forming Region”  
The 33rd Annual New Mexico Symposium, NRAO, Socorro, NM, November 2017

“A Detailed Analysis of the Physical Conditions in the Infrared Dark Clouds in the Region IGGC 16/23”  
SAO Astronomy Summer Research Symposium, Center for Astrophysics, Cambridge, MA, August 2016

“Using HST/STIS data to Model High-Velocity Bullets from a Dying Star”  
Special Astrophysics Seminar, Jet Propulsion Laboratory, Pasadena, CA, December 2015

“The Natural Focusing of Light”  
Physics and Nature Conference, Pace University, White Plains, NY, November 2013

**Poster Presentations:**

“A Detailed Analysis of the Physical Conditions in the Infrared Dark Clouds in the Region IGGC 16/23”  
American Astronomical Society Meeting, Grapevine, TX, January 2017

“Using HST/STIS data to Model High-Velocity Bullets from a Dying Star”  
Undergraduate Research and Creative Activities (URECA) Symposium, Stony Brook, May 2016

“Probing Dark Matter by Modeling Gravitational Lensing of Spiral Galaxies”  
CUWiP Women in Physics Conference, Wesleyan University, CT, January 2016  
Exploration in STEM Symposium, Stony Brook University, Stony Brook, NY, August 2015  
Undergraduate Research and Creative Activities (URECA) Symposium, Stony Brook, April 2015

“Optical Demonstration of Gravitational Lensing”  
Undergraduate Research and Creative Activities (URECA) Symposium, Stony Brook, April 2014

“A Study of Evolving Caustics Formed by Evaporating Water Droplets”  
Frontiers in Optics, OSA Annual Meeting and Exhibit/Laser Science XXIX, Orlando, FL, October 2013  
Symposium for Summer Research, Stony Brook University, Stony Brook, NY, August 2013

“Census of Blue Stars in the SDSS”  
American Astronomical Society Meeting, Long Beach, CA, January 2013  
New York Astronomical Society meeting, Stony Brook University, Stony Brook, NY, Spring 2012  
New York Astronomical Society meeting, Skidmore College, Saratoga, NY, Fall 2011

AWARDS

National Science Foundation Graduate Student fellowship (NSF GRF) *March 2017*

AND

HONORS:

- One of the selected number of incoming graduate students to receive this award

Sigma Pi Sigma Physics Honor Society, Stony Brook University *April 2016*

- Inducted through nomination by a faculty member for outstanding scholarship in physics

Researcher of the Month, Stony Brook University *Sep 2015*

- Recognition of outstanding research in undergraduate research

National Runner-Up and Regional Winner for the NCWIT Award for Aspirations in Computing *May 2013*

INTEL STS Finalist *March 2013*

- One of 40 finalists in the INTEL Science Talent Search National Competition

	National NASA WISH Scholar	<i>June 2012</i>
	<ul style="list-style-type: none"> <li>Attended an aerospace summer camp at Johnson Space Center, Houston, Texas</li> </ul>	
	Winner of the Northeastern US Astrobiology Short Story Contest	<i>March 2012</i>
	Regional Hessberg Advanced Astronomy Campership Winner	<i>June 2011</i>
	<ul style="list-style-type: none"> <li>Awarded a scholarship to attend the Advanced Astronomy Camp in Tucson, Arizona</li> </ul>	
<u>MENTORING</u> <u>AND</u> <u>OUTREACH:</u>	<i>TechPrep Mentor</i> , Stony Brook University	<i>June-July 2015</i>
	<ul style="list-style-type: none"> <li>Employed as a STEM summer camp counselor for middle school girls</li> </ul>	
	<i>Volunteer as Mystery Women for Explore Your Opportunities (EYO) Conference</i>	<i>April 2014/2015</i>
	<ul style="list-style-type: none"> <li>Educated 7<sup>th</sup> grade girls about STEM through interactive learning techniques</li> </ul>	
<u>ADDITIONAL</u> <u>EXPERIENCES</u>	<i>CUWiP Meeting Participant/Poster Presenter</i> , Rutgers University and Wesleyan University	<i>Jan 2015/2016</i>
	<ul style="list-style-type: none"> <li>Attended conference for undergraduate women in physics</li> </ul>	
	<i>Astronomy Club</i> , Stony Brook University	<i>2013-2016</i>
	<ul style="list-style-type: none"> <li>Attend weekly meetings and participate in educational trips (e.g. Northeast Astronomy Forum)</li> </ul>	
	<i>Sigma Beta Honor Society</i> , Stony Brook University	<i>2013-2016</i>
	<ul style="list-style-type: none"> <li>Participant in community service programs throughout the year</li> </ul>	
	<i>Deans List</i> , Stony Brook University	<i>2013-2016</i>
	<i>Field Hockey Club Team</i> , Stony Brook University	<i>2014-2015</i>
	<ul style="list-style-type: none"> <li>Attend weekly practices and weekend games</li> </ul>	