# Samantha Scibelli

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PhD Student, University of Arizona, Tucson AZ EDUCATION:

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

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

RESEARCH:

NASA Jet Propulsion Laboratory (JPL), Astrophysics Department

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 sunlike star

Stony Brook University, Physics and Astronomy Department

Stony Brook, NY

Pasadena, CA

Anticipated Graduation: 22'

Magna Cum Laude

Graduation: January 21, 2017

*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] Scibelli, S., Rosalba, P., & Keeton, C. Biases in inferring dark matter profiles from dynamical and lensing measurements 2018 (submitted to MRNAS)

[2] Scibelli, S., Sahai, R., & Morris, M. R. High-Velocity Bullets from V Hydrae, an AGB Star in Transition: Ejection History and Spatio-Kinematic Modeling, 2018, accepted to ApJ

[3] 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.

[4] Scibelli, S., Newberg, H. J., Carlin, J.L., & Yanny, B. Census of Blue Stars in SDSS DR8, 2015, VizieR Online Data Catalog, 221

[5] 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.,** Shirley, Yancy. Prevalence of Complex Organic Molecules in Prestellar Cores in the Taurus Molecular cloud 2019

## 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 (selected):

"Prevalent Organic Molecules towards Prestellar Cores in the Taurus Star Forming Region"
The Olympian Symposium 2018: gas and stars from milli- to mega- parsecs, Mediterranean Village Hotel & Spa, Paralia, Keterini, Greece, May 2018

"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:**

"Prevalent Organic Molecules towards Prestellar Cores in the Taurus Star Forming Region" Star and Planet Formation (SPF2), Biosphere, Tucson, AZ, March 2018

"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

National Science Foundation Graduate Student fellowship (NSF GRF)

March 2017

One of the few selected incoming graduate students to receive this award

AWARDS
AND
HONORS:

	Sigma Pi Sigma Physics Honor Society, Stony Brook University  • Inducted through nomination by a faculty member for outstanding scholarship in physics	April 2016
	Researcher of the Month, Stony Brook University • Recognition of outstanding research in undergraduate research	Sep 2015
	National Runner-Up and Regional Winner for the NCWIT Award for Aspirations in Computing	May 2013
	INTEL STS Finalist  • One of 40 finalists in the INTEL Science Talent Search National Competition	March 2013
	National NASA WISH Scholar  • Attended an aerospace summer camp at Johnson Space Center, Houston, Texas	June 2012
	Winner of the Northeastern US Astrobiology Short Story Contest	March 2012
	Regional Hessberg Advanced Astronomy Campership Winner  • Awarded a scholarship to attend the Advanced Astronomy Camp in Tucson, Arizona	June 2011
MENTORING AND OUTREACH:	* Astronomy Camp Counselor  • Employed as a counselor for the Advance Astronomy Camp in Tucson, Arizona	June 2018
	<ul> <li>TechPrep Mentor, Stony Brook University</li> <li>Employed as a STEM summer camp counselor for middle school girls</li> </ul>	June-July 2015
	<ul> <li>Volunteer as Mystery Women for Explore Your Opportunities (EYO) Conference</li> <li>Educated 7<sup>th</sup> grade girls about STEM through interactive learning techniques</li> </ul>	April 2014/2015
ADDITIONAL EXPERIENCES	<ul> <li>CUWiP Meeting Participant/Poster Presenter, Rutgers University and Wesleyan University</li> <li>Attended conference for undergraduate women in physics</li> </ul>	Jan 2015/2016
	Astronomy Club, Stony Brook University  • Attend weekly meetings and participate in educational trips (e.g. Northeast Astronomy Fo	2013-2016 orum)
	Sigma Beta Honor Society, Stony Brook University  • Participant in community service programs throughout the year	2013-2016
	Deans List, Stony Brook University	2013-2016
	<ul><li>Field Hockey Club Team, Stony Brook University</li><li>Attend weekly practices and weekend games</li></ul>	2014-2015