

Stawinski, Stephanie Mae

November 2018

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Research Interests: Galaxy Formation and Evolution, Absorption Line Systems, Chemical Evolution in and around Galaxies

EDUCATION

M.S. in Astronomy (Expected) San Diego State University, San Diego, CA	August 2017-Present
B.S. in Physics Arizona State University, Tempe, AZ	August 2013-May 2017
B.S. in Astrophysics Arizona State University, Tempe, AZ	August 2013-May 2017

RESEARCH EXPERIENCE

<i>Probing the Circumgalactic Medium at $z \sim 2$ using Close Quasar Pairs</i> Master's Thesis San Diego State University Advisor: Dr. Kate Rubin <ul style="list-style-type: none">Measured column densities and kinematics quasar absorption line systems hosting DLAsCompared the physical properties of the gas near a DLA to the gas within the surrounding CGMSoftware used: Python, Linetools, Pyigm, Specdb	Aug 2017-Present
<i>Measuring the Ratio of Dust to Metals in Damped Lyman α Systems</i> Senior Thesis Research Project Arizona State University Advisor: Dr. Sangeeta Malhotra <ul style="list-style-type: none">Developed a pipeline that produced a composite spectrum from >100 BOSS QSOs hosting DLAsAnalyzed the 2175Å absorption feature due to dust in the composite spectrumCompared composites with high metallicity DLAs to those comprised of mixed metallicity systems.Software used: Python	Aug 2016-May 2017
<i>Investigating Spectral Indices of Radio Galaxies at 140 MHz with LOFAR</i> NASA Space Grant project Barrett Honors Thesis Research Arizona State University Advisors: Dr. Evan Scannapieco, Dr. Rogier Windhorst, Dr. Marcus Bruggen, Dr. Karen Olsen <ul style="list-style-type: none">Used the reduced radio image to conduct an analysis on the calibration of LOFARMeasured the spectral index of confirmed radio galaxies to physical properties of the host galaxy, such as redshiftSoftware used: Python, PYBDSF, Ds9, TOPCAT, NED	Aug 2016-May 2017
<i>Low Frequency ARray (LOFAR): Cleaning and Imaging a 10 Degree Field of Sky</i> National Science Foundation Undergraduate Research Opportunity Arizona State University, USA Bochum University, Germany Hamburg University, Germany Advisors: Dr. Evan Scannapieco, Dr. Marcus Bruggen and Dr. Ralf J. Dettmar <ul style="list-style-type: none">Imaged and cleaned raw radio data on a patch of sky observed by LOFAR in the NetherlandsSoftware used: Python, CASA, Ds9, Linux/Unix, LOFAR pipeline, NED	Jan 2016-Aug 2016
<i>[CII] in the Interstellar Medium</i> Research Intern Arizona State University Advisor: Dr. Karen Olsen <ul style="list-style-type: none">Worked with python and C to model properties of CII emitting gas in distant galaxies.	Oct 2015-June 2016

PRESENTATIONS

<i>Probing the Circumgalactic Medium at $z \sim 2$ using Close Quasar Pairs</i> SDSU Astronomy Department Colloquium San Diego State University	April 2018
<i>Studying the Spectral Index of Radio Galaxies</i> 2017 NASA Space Grant Symposium Tempe, AZ	April 2017

POSTERS

<i>Probing the Circumgalactic Medium at $z \sim 2$ using Close Quasar Pairs</i> SDSU Student Research Symposium San Diego State University	March 2018
<i>Studying the Spectral Index of Radio Galaxies</i> Barrett, the Honors College Thesis Symposium 2017 Arizona State University	April 2017
<i>Studying Galaxy Magnetism with the LOFAR Telescope</i> NASA Undergraduate Research Symposium 2017 Arizona State University	Feb 2017
<i>Ratio of Dust to Metal Abundance in Quasar Absorption Line Systems from $1.9 < z < 3.3$</i> American Astronomical Society 2017 Winter Meeting Grapevine, TX	Jan 2017

PUBLICATIONS

<i>Additional Multicolor Photometric Observations of the Latest Eruption of the Recurrent Nova M31N 2008-12a</i> Wysocki, P. A.; Socia, Q.; Engesser, M. A.; Yenawine, M.; Stawinski, S. M.; Shafter, A. W. The Astronomer's Telegram, No. 12190, Nova, Transient, 2018ATel12190....1W	Nov 2018
<i>SIGAME simulations of the [CII], [OI] and [OIII] line emission from star forming galaxies at $z \sim 6$</i> Olsen, K.; Greve, T. R.; Narayanan, D.; Thompson, R.; Rios, L. N.; Stawinski, S. The Astrophysical Journal, Volume 846, Issue 2, article id. 105, 17 pp. (2017)	Sept 2017

OBSERVING EXPERIENCE

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- Mount Laguna Observatory | 40-inch reflector | Nova and Supernova Observations (+10 nights)
 - Mt Wilson Observatory | CHARA | Orbit of a binary system in the open cluster Praesepe (1 night)
 - Kitt Peak Observatory | 4 meter Mayall Telescope | Search for Lyman α emitters (2 nights)

SCHOLARSHIPS AND HONORS

• Ruth and Clifford Smith Astronomy Fellowship	Fall 2018-Spring 2019
• Reginald F. Buller Endowment Scholarship	Fall 2018-Spring 2019
• William F. Lucas San Diego Astronomy Association Memorial Scholarship	Fall 2018-Spring 2019
• Barrett, the Honors College Graduate, Arizona State University	May 2017
• 2016 CLAS (College of Liberal Arts and Sciences) Student Leader	Oct 2016
• New American University Scholar: President's Award	2013-2017

TECHNICAL SKILLS

Proficient- Python, Linux/Unix, Linetools, Pyigm, Speedb, Ds9, LATEX, Excel, TOPCAT, Git
Familiar- SQL, Source Extractor, CASA, PYBDSF, MATLAB, C

TEACHING EXPERIENCE

Lead Teaching Associate: Introduction to Astronomy Lab Instructor ASTR 109 San Diego State University Advises other Teaching Associates and ensures all labs are running properly	Aug 2018-Present
Guest Lecturer for Dr. Rubin ASTR 101 San Diego State University Gave hour long lectures to students in Astronomy 101	Spring 2018/Fall 2018
Teaching Associate: Introduction to Astronomy Lab Instructor ASTR 109 San Diego State University Responsible for all aspects of the course, including creating lectures, teaching, and grading	Aug 2017-Present

Community Astronomy Lecturer Lancaster Woodland Preserve, CA Creates interactive presentations about the moon and planets for children of all ages	Nov 2017-Present
Teaching Assistant: Introduction to Astronomy Lab Instructor AST 113/114 Arizona State University Responsible for all aspects of the course, including creating lectures, teaching, and grading	Jan 2016-May 2017
Griffith Observatory Museum Guide Griffith Observatory, Los Angeles, CA Gives talks and answers questions about astronomy for the public	July 2015-Present
SESE (School of Earth and Space Exploration) Mentor Arizona State University Advised incoming students in the department about research, coursework, and the University.	Aug 2014-May 2017

OUTREACH

Planetarium Show Presenter (+10 shows) San Diego State University Creates and performs planetarium shows for the community	Jan 2018-Present
Astronomy Night at Clay Elementary School Presenter San Diego State University Gave presentation about meteorites to elementary school students	Nov 2018
Summer Visitors Program (4 nights) Mount Laguna Observatory Operated telescopes (21 inch Buller Telescope), performed a night sky tour, and gave lecture to the public	Summer 2018
High School Camping Trip Sky Tour Presenter Mt Palomar Conducted a night sky tour for high school students	April 2018
Telescope Nights Volunteer Presenter (4 nights) San Diego State University Helped with telescopes and answered questions about the night sky for college students	Aug 2018-Nov 2018
Earth and Space Exploration Day (2 days) Arizona State University Set up event, hosted tables with information about rockets and spectroscopy for the public	Fall 2015, 2016
SESE/ASU Open House Telescope Operator (7 nights) Arizona State University Set up and operated telescopes (8 inch Meades) for public outreach nights	Nov 2014, 2015, 2016