

## Anne E. Jaskot

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CONTACT INFORMATION	Smith College Department of Astronomy Clark Science Center, 44 College Lane Northampton, MA 01063, USA	Phone: (413) 585-3964 ajaskot@smith.edu
RESEARCH INTERESTS	Galaxy evolution and the interstellar medium in starburst galaxies: <ul style="list-style-type: none"><li>• Star-formation: triggering H I gas content and kinematics, merger-driven star formation</li><li>• Feedback: emission-line galaxies, ionizing sources, nebular emission-line diagnostics, superbubbles, Lyman continuum optical depths of H II regions and galaxies</li></ul>	
EDUCATION	<b>Ph.D., Astronomy and Astrophysics</b> <span style="float:right"><b>2014</b></span> University of Michigan, Ann Arbor, Michigan Advisor: Prof. Sally Oey	
	<b>B.A., Astrophysics and Anthropology, magna cum laude</b> <span style="float:right"><b>2008</b></span> Williams College, Williamstown, Massachusetts Highest honors in Astrophysics, Russian language certificate	
FELLOWSHIPS AND AWARDS	Five College Astronomy Dept. Teaching and Research Fellowship <span style="float:right"><b>2014–present</b></span> NSF Graduate Research Fellowship <span style="float:right"><b>2011–2014</b></span> Willis I. Milham Prize for best Astronomy thesis <span style="float:right"><b>2008</b></span>	
TEACHING EXPERIENCE	<b>AST 337: Observational Techniques I</b> <span style="float:right"><b>present</b></span> <i>Instructor, Smith College</i> <ul style="list-style-type: none"><li>• Introduction to telescope observations, data processing, and IDL computer language</li><li>• Planned lectures, led telescope observations, and developed coding exercises</li></ul>	
	<b>AST 341: Observational Techniques II</b> <span style="float:right"><b>2015–present</b></span> <i>Instructor, Smith College</i> <ul style="list-style-type: none"><li>• Immersive, undergraduate, research-based course</li><li>• Led 11 students on observing run on WIYN 0.9m telescope at Kitt Peak, AZ</li><li>• Mentored students in independent research projects using data obtained</li></ul>	
	<b>ASTRO 461: Ground-Based Observatories</b> <span style="float:right"><b>2013</b></span> <i>Graduate Student Instructor, University of Michigan</i> <ul style="list-style-type: none"><li>• TA for intensive, 4-week, undergraduate immersion course at Kitt Peak, AZ</li><li>• Helped students plan observations and run MDM 1.3m telescope</li><li>• Taught data reduction tasks and facilitated reading discussions</li></ul>	
	<b>ASTRO 127: Naked Eye Astronomy</b> <span style="float:right"><b>2013</b></span> <i>Primary Instructor, University of Michigan</i> <ul style="list-style-type: none"><li>• Sole instructor for one-credit, planetarium-based course for non-majors</li><li>• Planned syllabus, lectures, inquiry-based learning activities, and assignments</li></ul>	
	<b>ASTRO 101: The Solar System and the Search for Life</b> <span style="float:right"><b>2010</b></span>	
	<b>ASTRO 102: Stars, Galaxies, and the Universe</b> <span style="float:right"><b>2010</b></span> <i>Graduate Student Instructor, University of Michigan</i> <ul style="list-style-type: none"><li>• Led lab activities, review sessions, and observing sessions</li><li>• Designed homework assignments</li></ul>	
	<i>Astronomy Active Learning Techniques, workshop participant</i> <span style="float:right"><b>2012</b></span> <i>Tutor for high school Physics, B.C. Calculus, and Algebra</i> <span style="float:right"><b>2008–2009</b></span>	

MENTORSHIP	Heather Kurtz, Smith College, Undergraduate Thesis <i>Peas in a Pod: Environment and Ionization in Green Pea Galaxies</i>	<b>2015–present</b>
	Derek Carroll, University of Massachusetts, Undergraduate Research <i>Sources of High-Energy Emission in the Green Pea Galaxies</i>	<b>2015–present</b>
	Kay Lowden, Mt. Holyoke College, Undergraduate Research <i>Shapes, Stars, and Redshift: Morphological Comparisons among H I-selected Starbursts</i>	<b>2015</b>
EMPLOYMENT	<b>Smith College</b> , FCAD Teaching and Research Fellow	<b>2014 – present</b>
	<b>University of Michigan</b> , NSF Graduate Research Fellow	<b>2011–2014</b>
	<b>University of Michigan</b> , Graduate Student Research Assistant Advisor: Prof. Sally Oey	
	<b>University of Michigan</b> , Graduate Student Instructor	<b>2010, 2013</b>
	<b>U.S. Dept. of Homeland Security</b> , Research Analyst, CACI Contractor	<b>2008–2009</b>
	<b>Williams College Astronomy Department</b> , Research Assistant Advisors: Prof. Karen Kwitter, Dr. Steven Souza	<b>2006–2007</b>
	<b>U.S. Naval Observatory</b> , Summer Research Internship Advisor: Dr. Arsen Hajian	<b>2005</b>
SERVICE	<i>Hubble Space Telescope</i> Cycle 23 Proposal Peer Review Panelist	<b>2015</b>
	Organizer for weekly department Galaxy Group journal club	<b>2012–2014</b>
	Organized volunteers to teach elementary school Science Olympiad team	<b>2013</b>
	Led hands-on astronomy activities for local scout troops	<b>2010, 2012</b>
	Member of Astronomy Department graduate student admissions committee	<b>2012</b>
	Organized graduate student activities for prospective student visit	<b>2012</b>
	Gave research talk to Political Science Dept. as part of their teacher training English for Speakers of Other Languages tutor	<b>2011</b> <b>2008-2009</b>
SKILLS	Analyzing multi-wavelength observations: X-ray data, optical photometry and spectroscopy, IR data, and H I 21 cm spectra	
	Querying large datasets (SDSS, WISE, GALEX)	
	Proficient in IDL computer language	
	Proficient with CLOUDY photoionization modeling	
	Spectroscopic data reduction and analysis with IRAF, CIAO, and XSPEC	

REFEREED  
PUBLICATIONS

1. **A. E. Jaskot**, M. S. Oey, J. J. Salzer, A. Van Sistine, E. F. Bell, & M. P. Haynes (2015): “From H I to Stars: H I Depletion in Starbursts and Star-forming Galaxies in the ALFALFA H $\alpha$  Survey,” *ApJ*, 808, 66.
2. **A. E. Jaskot** & M. S. Oey (2014): “Linking Ly $\alpha$  and Low-ionization Transitions at Low Optical Depth,” *ApJ Letters*, 791, 19.
3. **A. E. Jaskot** & M. S. Oey (2013): “The Origin and Optical Depth of Ionizing Radiation in the ‘Green Pea’ Galaxies,” *ApJ*, 766, 91.
4. E. W. Pellegrini, M. S. Oey, P. F. Winkler, S. D. Points, R. C. Smith, **A. E. Jaskot**, & J. Zastrow (2012): “The Optical Depth of H II Regions in the Magellanic Clouds,” *ApJ*, 755, 40.
5. **A. E. Jaskot**, D. K. Strickland, M. S. Oey, Y.-H. Chu, & G. García-Segura (2011): “Observational Constraints on Superbubble X-ray Energy Budgets,” *ApJ*, 729, 28.
6. R. B. C. Henry, K. B. Kwitter, **A. E. Jaskot**, B. Balick, M. A. Morrison, & J. B. Milingo (2010): “Abundances of Galactic Anticenter Planetary Nebulae and the Oxygen Abundance Gradient in the Galactic Disk,” *ApJ*, 724, 748.
7. J. L. Elliot, M. J. Person, A. A. S. Gulbis, S. P. Souza, E. R. Adams, B. A. Babcock, W. J. Gangestad, **A. E. Jaskot**, et al. (2007): “Changes in Pluto’s Atmosphere: 1988-2006,” *AJ*, 134, 1.
8. A. R. Hajian, S. M. Movit, D. Tofimov, B. Balick, Y. Terzian, K. H. Knuth, D. Granquist-Fraser, K. A. Huyser, A. Jalobeanu, D. McIntosh, **A. E. Jaskot**, S. Palen, & N. Panagia (2007): “An Atlas of [N II] and [O III] Images and Spectra of Planetary Nebulae,” *ApJS*, 169, 289.

CONFERENCE  
PROCEEDINGS

1. A. E. Jaskot & M. S. Oey (2015): “The Green Peas: Searching for LyC Emitters at Low Redshift,” *Proceedings International Astronomical Union Symposium No. 319*, (eds.) S. Kaviraj & H. Ferguson, in preparation.
2. A. E. Jaskot, M. S. Oey, J. J. Salzer, A. Van Sistine, E. F. Bell, & M. P. Haynes (2015): “ALFALFA H $\alpha$  Reveals How Galaxies Use Their H I Fuel,” *Proceedings International Astronomical Union Symposium No. 315*, (eds.) P. Jablonka, F. Van der Tak, & P. André, in preparation.
3. A. E. Jaskot & M. S. Oey (2014): “The Origin and Optical Depth of Ionizing Photons in the Green Pea Galaxies,” *Massive Young Clusters Near and Far: From the Milky Way to Reionization*, (eds.) D. Rosa-Gonzalez, Y. D. Mayya, & E. Terlevich, (INAOE & AMC).
4. A. E. Jaskot, D. K. Strickland, M. S. Oey, & Y.-H. Chu (2010): “The Origin of Excess X-ray Emission in Two LMC Superbubbles,” *The Dynamic ISM: A Celebration of the Canadian Galactic Plane Survey*, (eds.) R. Kothes, T. L. Landecker, & A. G. Willis, (San Francisco: ASP), 342.

## PRESENTATIONS

1. A. E. Jaskot, M. S. Oey, J. J. Salzer, A. Van Sistine, E. F. Bell, & M. P. Haynes, "Tracing H I Gas Cycles and Global Star Formation with the ALFALFA H $\alpha$  Survey," Oral Presentation, *Life-cycle of Gas in Galaxies: A Local Perspective*, AS-TRON, Dwingeloo, The Netherlands, Sept. 2015.
2. A. E. Jaskot, M. S. Oey, & D. A. Carroll, "Ionizing Photon Production and Escape in Extreme Starbursts: the Case of the Green Peas," Poster Presentation, *Focus Meeting 7: Stellar Physics in Galaxies Throughout the Universe*, International Astronomical Union General Assembly, Honolulu, HI, Aug. 2015.
3. A. E. Jaskot, M. S. Oey, J. J. Salzer, A. Van Sistine, E. F. Bell, & M. P. Haynes, "ALFALFA H $\alpha$  Reveals How Galaxies Use Their H I Fuel," Poster Presentation, *Symposium 315: From Interstellar Clouds to Star-Forming Galaxies: Universal Processes?*, International Astronomical Union General Assembly, Honolulu, HI, Aug. 2015.
4. A. E. Jaskot & M. S. Oey, "The Green Peas: Searching for LyC Emitters at Low Redshift, Poster Presentation," *Symposium 319: Galaxies at High Redshift and Their Evolution Over Cosmic Time*, International Astronomical Union General Assembly, Honolulu, HI, Aug. 2015.
5. A. E. Jaskot, "Ionizing Galaxies Wear Green: Searching for Escaping Ionizing Radiation with the Green Peas," Oral Presentation, Arizona State University, Tempe, AZ, Mar. 2015.
6. A. E. Jaskot, "H I, Stars, and Ionizing Photons: Gas Cycles and LyC Escape in Low-Redshift Starbursts," Colloquium, University of Massachusetts, Amherst, MA, Jan. 2015.
7. A. E. Jaskot, "The Green Peas: Searching for LyC Emitters at Low Redshift," Oral Presentation at Galaxy Group Meeting, Space Telescope, Science Institute, Baltimore, MD, Nov. 2014.
8. A. E. Jaskot, "Atomic Gas Cycles and Global Star Formation in Local Galaxies," Oral Presentation, *Star Formation Across Space and Time*, ESA/ESTEC, Noordwijk, The Netherlands, Nov. 2014.
9. A. E. Jaskot, "The Green Peas: High-Redshift Galaxies in a Low-Redshift Universe," Colloquium, Williams College, Williamstown, MA, Oct. 2014.
10. A. E. Jaskot, M. S. Oey, J. J. Salzer, A. Van Sistine, & M. P. Haynes, "Neutral Gas and Low-Redshift Starbursts: From Infall to Ionization," *223<sup>rd</sup> Meeting of the American Astronomical Society*, Jan. 2014.
11. A. E. Jaskot & M. S. Oey, "The Origin and Transport of Ionizing Photons in the Green Pea Galaxies," Oral Presentation, *5<sup>th</sup> Guillermo Haro Conference: Massive Young Star Clusters Near and Far*, Puebla, Mexico, Dec. 2013.
12. A. E. Jaskot & M. S. Oey, "The Ionization and Optical Depth of the 'Green Peas': Radiative Feedback in Extreme, Low-Redshift Starbursts," Poster Presentation, *9<sup>th</sup> Marseille Cosmology Conference: Physical Processes of Galaxy Formation*, Aix-en-Provence, France, July 2013.
13. A. E. Jaskot, M. S. Oey, J. J. Salzer, A. Van Sistine, & M. P. Haynes, "Triggered Star Formation in ALFALFA Starbursts," Poster Presentation, *2012 STScI May Symposium: Gas Flows in Galaxies*, Baltimore, MD, May 2012.

14. A. E. Jaskot, "HI and Triggered Star Formation in the ALFALFA Survey," Oral Presentation, Friday Scientific Lunch Talks, National Optical Astronomy Observatory, Tucson, AZ, Oct. 2011.
15. A. E. Jaskot, "HI and Triggered Star Formation," Oral Presentation at ALFALFA Group Meeting, Cornell University, Ithaca, NY, Sept. 2011.
16. A. E. Jaskot, D. K. Strickland, M. S. Oey, & Y.-H. Chu, "Chandra X-ray Observations of the LMC Superbubbles DEM L50 and DEM L152," Poster Presentation, *The Dynamic Interstellar Medium: A Celebration of the Canadian Galactic Plane Survey*, Naramata, BC, Canada, June 2010.

## POPULAR

1. J. Howard, "'Green Pea' Galaxies May Shed Light on High-Energy Event Seen in Early Universe," *Huffington Post*, 2013 April 09.
2. J. Williams, "'Green Peas' Offer Tiny Clues to Early Universe," *Universe Today*, 2013 April 05.
3. N. C. Moore, "'Green Pea Galaxies Could Help Astronomers Understand Early Universe," University of Michigan press release, 2013 April 03.
4. A. Hadhazy, "Peas Porridge Hot," *Natural History*, Vol. 121, No. 3, 2013 April 01.

ACCEPTED  
PROPOSALS

1. A. E. Jaskot & M. S. Oey, "LyC, Ly $\alpha$ , and Low Ions in Green Peas: Diagnostics of Optical Depth, Geometry, and Outflows"  
*Hubble Space Telescope* Cycle 23, 50 orbits, 2015
2. S. Ravindranath, A. Jaskot, H. Ferguson, & J. Tumlinson, "Spectral Diagnostics for the Reionization Era: Exploring the Semi-Forbidden C III] Emission in Low Metallicity Green Pea Galaxies"  
*Hubble Space Telescope* Cycle 23, 18 orbits, 2015
3. M. S. Oey, A. E. Jaskot, I. Orlitova, & A. Verhamme, "Towards a New Diagnostic of LyC Escape: Linking Ly $\alpha$  and LyC with the Green Peas"  
Magellan Telescopes, 2 nights, 2015
4. A. E. Jaskot & M. S. Oey, "The Green Peas: Low Optical Depths or Hard Ionizing Sources?"  
Magellan Telescopes, 2 nights, 2014
5. A. E. Jaskot & M. S. Oey, "Green Pea Galaxies: Extreme, Optically Thin Starbursts?"  
*Hubble Space Telescope* Cycle 21, 24 orbits, 2013
6. A. E. Jaskot & M. S. Oey, "Are the 'Green Peas' Optically Thin?"  
Magellan Telescopes, 4 nights, 2012
7. A. E. Jaskot & M. S. Oey, "The Green Peas: Escaping Ionizing Radiation at Low-Redshift?"  
Magellan Telescopes, 2 nights, 2012