

Curriculum Vitae
SALLY OEY

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RESEARCH INTERESTS

- Massive star populations:
Field stars, clustering, initial mass function, emission-line stars, star formation
- Massive star radiative feedback:
H II regions, photoionization, Lyman continuum-emitting and Ly α -emitting galaxies
- Massive star mechanical feedback:
Multi-SN superbubbles and superwinds, multiphase interstellar medium, starbursts
- Massive star chemical feedback:
Galactic chemical evolution of the Milky Way and other galaxies, enrichment processes

EDUCATION

University of Arizona, Tucson, AZ: Ph.D. 1995, Astronomy
Bryn Mawr College, Bryn Mawr, PA: A.B. 1986, Physics and Latin

POSITIONS

University of Michigan, Ann Arbor, MI, USA
Professor of Astronomy, College of Literature, Science, and the Arts (LSA). 09/13 – present
Associate Professor of Astronomy. 09/09 – 08/13
Assistant Professor of Astronomy. 07/04 – 08/09

Lowell Observatory, Flagstaff, AZ, USA
Associate Astronomer. 02/04 – 06/04
Assistant Astronomer. 02/01 – 02/04

Space Telescope Science Institute, Baltimore, MD, USA
1998 STScI Institute Fellow. 10/98 – 01/01

Institute of Astronomy, University of Cambridge, Cambridge, UK
Institute Postdoctoral Research Fellow in Observational Astronomy. 11/95 – 09/98

AFFILIATIONS

University of Michigan
Member, Michigan Institute for Research in Astrophysics 01/14 – present

Elsevier B.V.
Scientific Editor, *New Astronomy Reviews*, an International Review Journal. 02/11 – 08/14

University of Michigan
 Affiliated faculty, Museum Studies Program 09/10 – 07/13

New Mexico State University, Las Cruces, NM, USA
 Adjunct Assistant Professor of Astronomy. 09/04 – 08/07

Member: American Astronomical Society, International Astronomical Union, American Association for the Advancement of Science, International Dark Sky Association

AWARDS

FACULTY EARLY CAREER DEVELOPMENT AWARD (CAREER),
 National Science Foundation 2003 – 2008

1999 ANNIE JUMP CANNON AWARD, 1999
 American Astronomical Society and American Association of University Women

POSTDOCS AND STUDENTS

Postdocs and Postbacs:

Dr. Ashkbiz Danehkar, Dr. William Gray, Ben Dittenber, Dr. Genoveva Micheva, Dr. Norberto Castro Rodríguez, Dr. Jesús López-Hernández, Jessica Kellar, Dr. Joel Lamb, Dr. Eric Pellegrini, Dr. Dan Hanish, Dr. Carolina Kehrig, Dr. Thomas Bensby, Greg Walth, Dr. Nichole King

Ph.D. and M.S. Students:

Amit Sawant (Data Science), Lena Komarova,* Irene Vargas-Salazar,* Jesse Golden-Marx (Ph.D. 2019), Jessica Kellar (M.S. 2015), Anne Jaskot* (Ph.D. 2014, 2017 Hubble Fellow), Colin Slater (Ph.D. 2015), Jordan Zastrow* (Ph.D. 2013), Joel Lamb* (Ph.D. 2012, 2013 Ralph Baldwin Prize for best UM Ph.D. thesis in physical science and math), Zuzana Srostitik (Physics), Jeffrey Fogel (Ph.D. 2011)

*Ph.D supervisor

Undergraduate Students:

Luke Schwab (MRADS-UROP, LSA '23), Johnny Dorigo Jones (LSA '20), Ethan Prober (Engineering '19), Helen Januszewski (LSA '18), Tim Faerber (LSA '17), Scott McCormick (Engineering '18), Ben Greaves (Engineering '17), Kevin Paggeot (LSA '19), Ryan Keenan (LSA '17), Jesse Barnes (LSA '18), Xinyi Chen (LSA '17), Adham El-Batal (LSA '16), Aaron White (LSA '15), Cole Kushner (UROP/Engineering '15), Andrew Graus (LSA '12), Dominique Segura-Cox (LSA '11), Brian Mikolajczyk (LSA '11), Tony Zenn (LSA '08), Mehwish Khaliq (LSA '08), Todd Wilkinson (LSA '07), Sylvana Yelda (LSA '06), Saida Caballero-Nieves (LSA '05)

TEACHING

Astronomy 533, “Structure and Content of Galaxies”

Astronomy 461, “Ground-Based Observatories” (at Kitt Peak, AZ)

Astronomy 402, “Stellar Astrophysics”

Astronomy 210, “New Discoveries with the Magellan Observatory”

Astronomy 160/201, “Introduction to Astrophysics”

Astronomy 120, “Frontiers of Astronomy” First-Year Seminar

Astronomy 105/188, “The Cosmos Through the Constellations”

Astronomy 102 and 112, “Stars, Galaxies, and the Universe”

COMMUNITY SERVICE

Hubble Space Telescope Ultraviolet Legacy Science Definition Working Group, 2018 - 2019.

Chair

Science Advisory Committee, Large Binocular Telescope, 2016 – present

Cómission Dictaminadora Externa, INAOE, Puebla, Mexico, 2015 – 2018

External review panel.

Elected member, Board of Trustees, American Astronomical Society, 2015 – 2018.

Elected member, AURA Observatory Council, 2012 – 2015.

Association of Universities for Research in Astronomy, oversight committee for the National Optical Astronomy Observatory (NOAO).

STScI Financial Review Committee, *Hubble Space Telescope* proposals, 2008 – 2010.

Board of Directors, International Gemini Observatory, US representative, 2006 – 2009.

NASA Science Archives Working Group, 2002 – 2004.

Review panels:

NASA *Hubble Space Telescope* proposals (2005, 2001, Panel Co-Chair, 2010, Panel Chair, 2016), NOAO Time Allocation Committee (2012 – 2015), AAS Annie Jump Cannon Award (2009 - 2011), CONICYT Gemini Fund, Chile (2007 – 2009), NASA *Chandra X-ray Observatory* proposals (Panel Deputy Chair, 2006), NSF Committee of Visitors external review panels (Astronomical Sciences 2005, Antarctic Sciences 2009), NASA Chandra Fellowship program (2004), NSF AST Astronomy and Astrophysics Research Grant program (2003), NASA Astrophysics Theory Program (1999, Panel Chair, 2002)

DEPARTMENT AND INSTITUTIONAL SERVICE

University of Michigan Member Representative to AURA, 2016–present

Department Extremely Large Telescope Committee, 2017–present

Department Curriculum Committee, 2006–2019; Chair, 2009–2010 and 2012–2014

Graduate Preliminary Examinations Committee, 2005, 2006; Chair, 2007, 2014

Department Graduate Admissions Committee, 2010, 2013, 2014, 2020

Lead for Department Long-Range Plan on Undergraduate Program; and Galactic Astronomy 2009–2011

Telescope Time Allocation Committee, 2004–06; 2008–09; 2016–17

Faculty Search Committees, 2004–05; 2005–06; Chair 2019–20

Steering Committee, Indigo: The LSA Asian and Asian-American Faculty Alliance, 2016–2017, 2019–2020

Chair, F2017

LSA Divisional Evaluation Committee for Natural Science, 2014–2017

Board of Advisors, UM Museum of Natural History, 2010–2016

Steering Committee, UM Museum Studies Program, 2010–2013

Elected member, LSA Curriculum Committee, 2009–2012 (on sabbatical 2011)

Faculty Advisory Committee to the Chief Diversity Officer, 2017–2020

Academic Affairs Advisory Committee, 2015–2016

Senate Assembly committee to advise the Provost

Elected member, Senate Advisory Committee on University Affairs (SACUA), 2012–2015

Executive committee of the Faculty Senate; **Vice Chair**, 2014–2015

SACUA Representative to: General Counsel Advisory Committee, Development Advisory Committee, Government Relations Advisory Committee, Secretary of the University Advisory Committee

PUBLIC OUTREACH HIGHLIGHTS

Coordinator, Michigan Dark Skies	2017 – present
Advocacy group to combat light pollution: https://sites.lsa.umich.edu/darkskies/	
Chair, Ann Arbor Joint Energy and Planning Commissions Lighting Ordinance Working Group	
Lead organizer, Winter 2009 Theme Semester, <i>The Universe: Yours to Discover</i>	2008 – 2009
Navajo/Hopi Teacher Outreach Program, Lowell Observatory	2001 – 2004
University of Arizona Astronomy Camps, Counselor and Assistant Director	1991 – 1997

SELECTED RECENT BIBLIOGRAPHY

- 2020 B. Dittenber†, M. S. Oey, E. Hodges-Kluck, E. Gallo, M. Hayes, G. Oestlin, & J. Melinder, “Accretion-Driven Sources in Spatially Resolved Ly α Emitters,” *ApJ*, 890, L12
- 2019 W. J. Gray*, M. S. Oey, S. Silich, & E. Scannapieco, “Catastrophic Cooling in Superwinds: Line Emission and Non-equilibrium Ionization,” *ApJ*, 887, 161
- 2018 M. S. Oey, J. Dorigo Jones‡, N. Castro*, P. Zivick, G. Besla, H. C. Januszewski‡, M. Moe, N. Kallivayalil, & D. J. Lennon, “Resolved Kinematics of Runaway and Field OB Stars in the Small Magellanic Cloud,” *ApJ*, 867, L8
- 2018 N. Castro*, M. S. Oey, L. Fossati, & N. Langer, “The Spectroscopic Hertzsprung-Russell Diagram of Hot, Massive Stars in the SMC,” *ApJ*, 868, 57
- 2017 A. E. Jaskot, M. S. Oey, S. Scarlata, & T. Dowd, “Kinematics and Optical Depth in the Green Peas: Suppressed Superwinds in Candidate LyC Emitters,” *ApJ*, 851, L9
- 2017 M. S. Oey, C. N. Herrera, S. Silich, M. Reiter, B. L. James, A. E. Jaskot, & G. Micheva*, “Dense CO in Mrk 71-A: Superwind Suppressed in a Young Super Star Cluster,” *ApJ*, 849, L1
- 2017 R. P. Keenan‡, M. S. Oey, A. E. Jaskot, & B. L. James, “Haro 11: Where is the Lyman Continuum Source?,” *ApJ*, 848, 12
- 2017 G. Micheva*, M. S. Oey, A. E. Jaskot, & B. L. James, “Mrk 71/NGC 2366: The Nearest Green Pea Analog,” *ApJ*, 845, 165
- 2017 M. S. Oey, J. López-Hernández*, J. A. Kellar†, E. W. Pellegrini, K. D. Gordon, K. Jameson, A. Li, S. C. Madden, M. Meixner, J. Roman-Duval, C. Bot, M. Rubio, & A. G. G. M. Tielens, “SAGE 8 μ m and 24 μ m Dust Emission and H II Region Radiative Transfer in the Magellanic Clouds,” *ApJ*, 844, 63
- 2016 J. B. Golden-Marx†, M. S. Oey, J. B. Lamb*, A. S. Graus‡, & A. S. White‡, “Classical Oe Stars in the Field of the Small Magellanic Cloud,” *ApJ* 819, 55
- 2016 J. B. Lamb*, M. S. Oey, D. M. Segura-Cox‡, A. S. Graus‡, D. C. Kiminki, J. B. Golden-Marx*, J. Wm. Parker, “The Runaways and Isolated O-Type Star Spectroscopic Survey of the SMC (RIOTS4),” *ApJ* 817, 113

- 2015 A. E. Jaskot†, M. S. Oey, Salzer, J. J., Van Sistine, A., Bell, E. F., Haynes, M. P., “From H I to Stars: H I Depletion in Starbursts and Star-forming Galaxies in the ALFALFA H α Survey,” ApJ 808, 66
- 2014 A. E. Jaskot† & M. S. Oey, “Linking Ly α and Low-ionization Transitions at Low Optical Depth,” ApJ, 791, L19
- 2013 J. Zastrow†, M. S. Oey, S. Veilleux, & M. McDonald, “New Constraints on the Escape of Ionizing Photons in Starburst Galaxies from Ionization-Parameter Mapping,” ApJ, 779, 76
- 2013 M. S. Oey, J. B. Lamb†, C. T. Kushner‡, E. W. Pellegrini*, & A. S. Graus‡, “A Sample of OB Stars that Formed in the Field,” ApJ 768, 66
- 2013 A. E. Jaskot† & M. S. Oey, “The Origin and Escape of Ionizing Radiation in the ‘Green Pea’ Galaxies,” ApJ, 766, 91
- 2013 J. B. Lamb†, M. S. Oey, A. S. Graus‡, F. C. Adams, & D. M. Segura-Cox‡, “The Initial Mass Function of Field OB Stars in the Small Magellanic Cloud,” ApJ, 763, 101
- 2012 A. S. Graus‡, J. B. Lamb†, & M. S. Oey, “Discovery of New, Dust-Poor B[e] Supergiants in the Small Magellanic Cloud,” ApJ, 759, 10
- 2012 E. W. Pellegrini*, M. S. Oey, P. F. Winkler, S. D. Points, & R. C. Smith, “The Optical Depth of H II Regions in the Magellanic Clouds,” ApJ, 766, 138
- 2011 M. S. Oey, “On the Origin of the Salpeter Slope for the Initial Mass Function,” ApJ, 739, L46

*Postdoc advisee

†Graduate or postbac advisee

‡Undergraduate advisee