

CURRICULUM VITAE
Crystal L. Martin

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University of California
Santa Barbara, CA 93106-9530

EDUCATION: Ph.D. Astronomy 1996 University of Arizona
B.A. Physics, Summa Cum Laude 1990 University of Colorado, Boulder

EMPLOYMENT:

2007 - Professor of Physics, University of California, Santa Barbara
2005 - 2007 Associate Professor of Physics, University of California, Santa Barbara
2001 - 2005 Assistant Professor of Physics, University of California, Santa Barbara
1999 - 2002 Sherman Fairchild Fellow, Caltech, Pasadena, CA
1996 - 1999 Hubble Fellow, Space Telescope Science Institute, Baltimore, MD
1995 - 1996 Research Assistant, Steward Observatory, University of Arizona
1992 - 1995 National Science Foundation Graduate Fellowship, University of Arizona

AWARDS:

Women in Science (WISe) Distinguished Speaker, Rochester Institute of Technology 2016
Alfred P. Sloan Foundation Fellowship 2003
David & Lucile Packard Foundation Fellowship 2002
Phi Beta Kappa 1989

RECENT PROFESSIONAL ACTIVITIES:

Chair, Keck Cosmic Web Imager Science Advisory Team, 2011 - 2017
General Member, Aspen Center for Physics, 2010 - 2021
Overseas Fellow, Churchill College, Cambridge University, 2013-present
Co-Chair, Keck Science Steering Committee, 2013 - 2017
TAC Member, Hubble Space Telescope Proposal Review, 2017
Member, International Astronomical Union
Member, American Astronomical Society

RECENT DEPARTMENT, PUBLIC, AND UNIVERSITY SERVICE:

Member, Academic Senate Council on Budget and Planning, 2018-2019
Head, UCSB Remote Observing Station, 2016- present
Chair, Peale Lecture, 2015-present
Chair, Faculty Search Committee, 2015-2017
Member, Department FTE Committee, 2010-present
Public Speaker, Monroe Elementary (2016), Science Night (2018), SBAU (2019), Riverside AU (2020)

TEACHING & MENTORING EXPERIENCE:

Undergraduate Majors: Galaxies (Phys 136), Observational Astronomy (Phys 134), Physics of Stars (Phys 132), Cosmology (Phys 133)

Graduate: Extragalactic Astrophysics (Phys235), Galactic Dynamics (Phys 234), Stellar Structure and Evolution (Phys232), Interstellar Medium (Phys 233)

Undergraduate Non-majors: Basic Astronomy (Astro 1), Honors Supplement to Basic Astronomy (Astro 1H), History of the Universe (Astro 2)

PhD Students: Zixuan Peng (current), Stephanie Ho (TAMU Fellow; NSF Postdoctoral Fellow), Kurt Soto (Postdoc, ETH Zurich), Taro Sato (Postdoc, Saint Mary's University), Colleen Schwartz (Consultant, Ab Initio Software)

Postdoctoral Mentees: Weida Hu (TAMU), Alaina Henry (STScI), Moire Prescott (faculty, NMSU), Nicolas Bouché (faculty, Lyon), Dawn Erb (faculty, UWM), Marcin Sawicki (faculty, St. Mary's U.), Akimi Fujita (education), Molly Peeples (STScI), Joo Heon Yoon (industry)

SELECTED PUBLICATIONS:

Resolving the Mechanical and Radiative Feedback in J1044+0353 with KCWI Spectral Mapping, Martin, C. L., Peng, Z., and Li, Y. 2024, preprint

CLASSY VII: Using Lyman- α to Probe ISM Properties, Hu, Weida, Martin, C.L. et al., 2023, ApJ, 956, 39

J1044+0353: Using KCWI to Explore Spatial Variations in Metallicity, Peng, Z., Martin, C.L. et al. 2023, ApJ, 954, 214.

CLASSY III. The Properties of Starburst-driven Warm Ionized Outflows, ApJ, Xu, Xinfeng et al. 2022, 933, 222

The COS Legacy Archive Spectroscopic SurveY (CLASSY) Treasury Atlas, Berg, D. A. & the CLASSY TEAM, 2022, ApJ, 261, 31

How Identifying Circumgalactic Gas by Line-of-sight Velocity Instead of the Location in 3D Space Affects O VI Measurements, Ho, S. H., Martin, C. L., and Schaye, J. 2021, ApJ, 923, 137

Exploring the Dust Content of Galactic Halos with HERSCHEL. III. NGC 891, Yoon, J. H., Martin, C. L., Veilleux, S., and Meléndez, M., Mueller, T., Gordon, K. D., Cecil, G., Bland-Hawthorn, J., and Engelbracht, C. 2021, MNRAS, 502, 969

Morphological and Rotation Structures of Circumgalactic Mg II Gas in the EAGLE Simulation and the Dependence on Galaxy Properties, Ho, S. H., Martin, C. L., and Schaye, J. 2020, ApJ, 904, 76

Resolving 3D Disk Orientation Using High-resolution Images: New Constraints on Circumgalactic Gas Inflows, Ho, S. H., Martin, C. L. 2020, ApJ, 888, 14

How Gas Accretion Feeds Galactic Disks, S. H. Ho, Martin, C. L., & Turner, M. L. 2019, ApJ, 875, 54

The Lyman- α Line Profiles of Ultraluminous Infrared Galaxies: Fast Winds and Lyman Continuum Leakage, Martin, C. L. et al. 2015, ApJ, 803, 6

Demographics and Physical Properties of Gas Outflows/Inflows at $0.4 < z < 1.4$, Martin, C. L. et al. 2012, ApJ, 760, 127

Chandra Observations of the Dwarf Starburst Galaxy NGC 1569, C. L. Martin,

H. A. Kobulnicky, & T. M. Heckman, 2002, ApJ, 574, 663.

Mapping Large-Scale Gaseous Outflows in Ultraluminous Galaxies with Keck II ESI Spectra: Variations in Outflow Velocity with Galactic Mass, C. L. Martin, 2005, ApJ, 621, 227

Star Formation Thresholds in Galactic Disks, C. L. Martin & R. C. Kennicutt, 2001, ApJ, 555, 301.