

Curriculum Vitae

RAQUEL A. MARTINEZ

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EDUCATION

The University of Texas at Austin, Austin, TX Aug 2014 – Aug 2021
Ph. D. in Astronomy, Concentration in Teaching & Mentoring
Advisor: Dr. Adam Kraus

Wesleyan University, Middletown, CT Aug 2011 – May 2013
M. A. in Astronomy
Thesis: *Searching for Spectral Signatures of the Hidden Secondary Component of BM Ori: Improved Spectroscopic Findings*
Advisor: Dr. Seth Redfield

California Institute of Technology, Pasadena, CA Sept 2004 – June 2008
B. S. in Astrophysics

RESEARCH POSITIONS

NSF MPS-Ascend Fellow, UC Irvine Sept 2022 – Present
Postdoctoral Scholar, S. Sallum, UC Irvine Sept 2021 – Aug 2022
Harrington Graduate Research Fellow, UT Austin Sept 2014 – Aug 2021
NASA Earth & Space Sciences Fellow, UT Austin Sept 2017 – Aug 2020
Research Assistant, A. Kraus, UT Austin Aug 2014 – Aug 2021
Intern, D. Padgett, NASA Goddard Space Flight Center June 2013 – June 2014
Research Assistant, S. Redfield, W. Herbst, Wesleyan University Sept 2011 – May 2013

FELLOWSHIPS, ACADEMIC HONORS & AWARDS

NSF MPS-Ascend Postdoctoral Fellowship Sept 2022 – Present
Three year \$100,000 postdoctoral fellowship

Robert Smith Davis and Lyall Pickett Davis Fellowship April 2019
\$1000 travel grant to attend Extreme Solar Systems IV in Reykjavic, Iceland

UT Graduate School Professional Development Award July 2018
\$600 of travel support to attend Cool Stars 20 at Boston University

Fred T. Goetting, Jr. Memorial Endowed Presidential Fellowship, UT Austin Dept. of Astronomy 2017
Recognizes a student for outstanding service to the department

NASA Earth & Space Science Fellowship Sept 2017 – Present
Three year \$35,000 graduate fellowship

Board of Visitors Graduate Student 2nd Year Defense Award, UT Austin Dept. of Astronomy 2016
Given in recognition for an outstanding Second Year defense of research to date

AAS FAMOUS Travel Grant Nov 2016
\$500 of travel support to attend Winter AAS #229 in Grapevine, TX

UT Graduate School Professional Development Award Nov 2016
\$800 of travel support to attend High-Contrast Imaging in Space Conference at STScI

Frank N. Edmonds, Jr. Memorial Fellowship , UT Austin Dept. of Astronomy	2015
Given to a second or third year student who shows strong promise in research	
Donald D. Harrington Fellowship , UT Austin Graduate School	Sept 2014 – Present
Three year \$36,000 graduate fellowship for the 1 st , 2 nd , and 5 th years	
Littell Prize , Wesleyan University	May 2013
For excellence in one or more advanced courses in astronomy	
President's Scholar , California Institute of Technology	Sept 2004 – June 2008
Four year full-tuition scholarship	

SUCCESSFUL OBSERVING PROPOSALS

Hobby-Eberly Telescope: LRS2, 30.7 hours, (PI)	Dec 2016 – Dec 2018
Gemini North: GNIRS, 1.4 hours, (PI)	2019B
Keck-I: LRIS, 3 1/2 nights, (Co-I)	2021B, 2022AB
Keck-II: NIRSPA0, 3 1/2 nights, (Co-I)	2021B, 2022AB
<i>Hubble Space Telescope</i> : WFC3/UVIS, 26 orbits, (Co-I)	Cycle 28
<i>James Webb Space Telescope</i> : MIRI, NIRCам, NIRISS, NIRSpec (Collaborator)	Early Release Science

PRESENTATIONS & PANELS

University of San Diego , Colloquium, San Diego, CA	Oct 2022
AAS Division of Dynamical Astronomy , Invited Speaker, Virtual	May 2021
KIPAC Tea Talk , Invited Speaker, Virtual	Dec 2020
Carnegie EPL Seminar , Invited Speaker, Virtual	Nov 2020
Carnegie Observatories , Invited Speaker, Virtual	Oct 2020
JPL Exoplanet Journal Club , Invited Speaker, Virtual	Oct 2020
SACNAS National Diversity in STEM Conference , Contributed Talk, Virtual	Oct 2020
AAS #237 , Contributed Talk, Honolulu, HI	Jan 2020
Brown Dwarf-Exoplanet Connection Workshop III , Contributed Talk, Newark, DE	Oct 2019
Center for Astrophysics Star & Planets Seminar , Invited Speaker, Cambridge, MA	Oct 2019
Boston University , Invited Speaker, Boston, MA	Oct 2019
6th Annual GMT Community Science Meeting , Contributed Talk, Honolulu, HI	Sept 2018
Women in Astronomy IV , Austin, TX	June 2017
Co-designer & Co-presenter of <i>Practicing Allyship: Recognizing and Confronting Macro/Microaggressions</i>	
Workshop with Brandon Bozek and Caitlin Casey	
Dept. of Astronomy Board of Visitors Meeting , Invited Speaker, UT Austin	Feb 2016
Harrington Symposium , Invited Speaker, Amarillo, TX	April 2015
Harrington Fellows Program Board Meeting , Invited Speaker, UT Austin	March 2015

TEACHING EXPERIENCE & PUBLIC OUTREACH

Astronomy on Tap Organizer and Co-Host , Austin, TX	Jul 2016 – Mar 2019
Girl Day STEM Festival Volunteer , UT Austin	Feb 2016 – Present
<ul style="list-style-type: none"> Coordinated UT Department of Astronomy involvement in event attended by >5000 K-8 school-aged children 	
AAS Astronomy Ambassador	Jan 2017 – Present
Astronomy on Tap Talk , Austin, TX	May 2015, May 2016
Smart Kids: Career Paths and Personal Journeys in Science , Panelist, UT Austin	Mar 2018
Teaching Assistant , AST 364P <i>Planetary Systems</i> , UT Austin	Fall 2017
CNS Science in the Public Square , Panelist, UT Austin	Nov 2016
Young Scientists' Day , Travis Heights Elementary School	Nov 2016

James Webb Space Telescope Exhibit Volunteer , SXSW Gaming Expo	March 2015, 2016
Teaching Assistant , Wesleyan University	Fall 2011 – Spring 2013
• <i>Introductory Astronomy, Descriptive Astronomy, The Universe</i>	
Outreach Volunteer , Van Vleck Observatory, Wesleyan University	Fall 2011 – Spring 2013

PROFESSIONAL DEVELOPMENT

Postdoc Leadership Institute , Society for Advancement of Chicanos/Hispanics and Native Americans in Science	Oct 2022
Institute for Scientist & Engineer Educators Leadership by Design , UCSC	2021
Institute for Scientist & Engineer Educators Professional Development Program , UCSC	2017 – 2019
Women in Astronomy IV , Austin, TX	June 2017
Inclusive Astronomy , Vanderbilt University	June 2015

PROFESSIONAL ACTIVITIES & ACADEMIC SERVICE

Reviewer , AAS Journals	2022 – Present
Full Member , American Astronomical Society	2022 – Present
Mentoring Working Group Member , NASA Bridge Program	Sept 2022 – Oct 2022
National Liaison , Society for Advancement of Chicanos/Hispanics and Native Americans in Science, UC Irvine Chapter	Sept 2022 – Present
New Professional Member , Society for Advancement of Chicanos/Hispanics and Native Americans in Science	2022 – Present
Local Organizing Committee , Bashfest Symposium, UT Austin	2017
UT Austin Department of Astronomy Leadership Positions	
CNS Dean's Council	Sept 2017 – April 2019
Equity & Inclusion Group, Co-Founder	Aug 2016 – Present
Graduate Student Representative	May 2016 – May 2017
UT Graduate Student Assembly Representative	Sept 2015 – May 2016
Association of Women in Astronomy Research and Education, Coordinator	2014 – Present
Graduate Student Member , Society for Advancement of Chicanos/Hispanics and Native Americans in Science	2016 – 2021
Junior Member , American Astronomical Society	2012 – 2021
Representative , Educational Policy Committee, Wesleyan University	Fall 2012 – Spring 2013
Executive Committee , Graduate Student Association, Wesleyan University	2012 – 2013

PUBLICATIONS

A Mid-Infrared Study of Directly-Imaged Planetary-Mass Companions us Archival Spitzer/IRAC Images

Martinez, R. A., Kraus, A. L. 2022, AJ, 163, 36

Searching for Wide Companions and Identifying Circum(sub)stellar Disks Through PSF-fitting of Spitzer/IRAC Archival Images

Martinez, R. A., Kraus, A. L. 2019, AJ, 158, 134

The JWST Early Release Science Program for Direct Observations of Exoplanetary Systems II: A 1 to 20 Micron Spectrum of the Planetary-Mass Companion VHS 1256-1257 b

Miles, B. E., Biller, B. A., Patapis, P., et al. (including **Martinez, R. A.**) 2022, in review

The JWST Early Release Science Program for Direct Observations of Exoplanetary Systems I: High Contrast Imaging of the Exoplanet HIP 65426 b from 2-16 μ m

Carter, A. L., Hinkley, S., Kammerer, J., et al. (including **Martinez, R. A.**) 2022, in review

The JWST Early Release Science Program for the Direct Imaging and Spectroscopy of Exoplanetary Systems
Hinkley, S. Carter, A. L., Ray, S., et al. (including **Martinez, R. A.**) 2022, PASP, 134, 095003

TESS Hunt for Young and Maturing Exoplanets (THYME): A planet in the 45 Myr Tucana-Horologium association
Newton, E. R., Mann, A. W., Tofflemire, B. M., Pearce, L., Rizzuto, A. C., Vanderburg, A., **Martinez, R. A.**, et al. 2019, ApJL, 880, L17

How to Constrain Your M Dwarf. II. The Mass–Luminosity–Metallicity Relation from 0.075 to 0.7 Solar Masses
Mann, A. W., Dupuy, T., Kraus, A. L., Gaidos, E., Ansdell, M., Ireland, M., Rizzuto, A. C., Hung, C.-L., Dittmann, J., Factor, S., Feiden, G., **Martinez, R. A.**, Ruíz-Rodríguez, D., Chia Thao, P. 2019, ApJ, 871, 63

Martinez, R. A., Silvia, D.W., Rice, E.L., & Porter, J. (2022). Value of the array of returner roles within the Professional Development Program. pp. 381–388 in S. Seagroves, A. Barnes, A.J. Metevier, J. Porter, & L. Hunter (Eds.), *Leaders in effective and inclusive STEM: Twenty years of the Institute for Scientist & Engineer Educators*. UC Santa Cruz: Institute for Scientist & Engineer Educators.

https://escholarship.org/uc/isee_pdp20yr

Finkelstein, K., **Martinez, R. A.**, & Vanderbosch, Z. (2022). Designing and implementing a PDP inquiry activity for an introductory astronomy research methods course. pp. 221–232 in S. Seagroves, A. Barnes, A.J. Metevier, J. Porter, & L. Hunter (Eds.), *Leaders in effective and inclusive STEM: Twenty years of the Institute for Scientist & Engineer Educators*. UC Santa Cruz: Institute for Scientist & Engineer Educators.

https://escholarship.org/uc/isee_pdp20yr