

Curriculum Vitae

RAQUEL A. MARTINEZ

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EDUCATION

The University of Texas at Austin , Austin, TX	Sept 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	
Advisor: Dr. Seth Redfield	
California Institute of Technology , Pasadena, CA	Sept 2004 – June 2008
B. S. in Astrophysics	

RESEARCH INTERESTS

Star & Planet Formation, including:

- Direct-imaging and spectroscopy of young brown dwarfs and exoplanets
- Brown dwarf and exoplanet atmospheres and evolution
- Exoplanet demographics

POSITIONS

Postdoctoral Scholar , UC Irvine	Sept 2021 – Present
Harrington Graduate Research Fellow , UT Austin	Sept 2014 – Aug 2021
NASA Earth & Space Sciences Fellow (NESSF) , UT Austin	Sept 2017 – Aug 2020
Research Assistant , A. Kraus, UT Austin	Sept 2016 – Aug 2017
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

Robert Smith Davis and Lyall Pickett Davis Fellowship	April 2019
\$1000 travel grant to attend Extreme Solar Systems IV in Reykjavik, 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 – Aug 2020
Three year \$45,000/yr 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 – Aug 2021
Three year \$36,000/yr 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, 1/2 night, (Co-I)	2021B
Keck-II: NIRSPAO, 1/2 night, (Co-I)	2021B
Hubble Space Telescope: WFC3/UVIS, 26 orbits, (Co-I)	Cycle 28
James Webb Space Telescope: MIRI, NIRCarn, NIRISS, NIRSpec, (Collaborator)	Early Release Science

PRESENTATIONS & PANELS

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
Northeast Conference for Undergraduate Women in Physics , Panelist, Yale	Jan 2012

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

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

Graduate Student Program Working Group , UT Austin	Oct 2020 – May 2021
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 – Aug 2021
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 – Aug 2021
Member , Society for Advancement of Chicanos/Hispanics and Native Americans in Science	Aug 2016 – Present
Junior Member , American Astronomical Society	2012 – Present
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. 2021, AJ, in press (arXiv:2111.03087)

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

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