

## EDUCATION

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- University of California, Los Angeles** September 2018  
Ph.D. in Astronomy, Advisors: Prof. Ian S. McLean, Prof. Michael P. Fitzgerald  
Dissertation: *Characterizing Low-Mass Stars and Brown Dwarfs and Upgrading NIRSPEC*
- University of California, Los Angeles** June 2014  
M.S. in Astronomy, Advisors: Prof. Ian S. McLean, Prof. Michael P. Fitzgerald  
Masters Thesis: *Surface Gravity Studies of Brown Dwarfs*
- Texas A&M University** May 2012  
B.S. in Physics, B.A. in French, *magna cum laude*, Undergraduate Research Scholar  
Senior Thesis: *Optical Design of a Red Sensitive Spectrograph*,  
Advisors: Prof. Darren DePoy, Prof. Jennifer Marshall

## POSTDOCTORAL RESEARCH EXPERIENCE

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- University of California, Santa Cruz** September 2018– Current  
NSF Postdoctoral Scholar, UC Chancellor’s Fellow *Mentor: Prof. Andy Skemer*
- PI of PEAS: The Planet as Exoplanet Analog Spectrograph, a novel instrument for Lick Observatory designed to observe Solar System planets as exoplanets
  - Characterizing the physical properties of the coldest brown dwarfs with infrared spectroscopy
  - Doppler Imaging of brown dwarfs with upgraded NIRSPEC
  - Co-PI of IGNIS, concept for a next generation high resolution infrared spectrograph for Keck
- W. M. Keck Observatory** August – October 2018  
Keck Visiting Scholar *Mentor: Dr. Greg Doppmann*
- Instrument Scientist for the NIRSPEC upgrade for the Keck II telescope. Oversaw the integration and testing of the upgrade on the summit of Maunakea.

## SELECTED GRANTS, AWARDS, AND HONORS

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- Kavli Frontiers of Science Fellow 2020
- Keck Science Steering Committee White Paper Funding: *\$20,000 (Co-PI)* 2020
- Heising Simons Foundation Award: *\$400,000 (PI)* 2020–2022
- Keck Science Steering Committee White Paper Funding: *\$10,000 (Co-PI)* 2019
- NSF Astronomy & Astrophysics Postdoctoral Fellowship *\$300,000 (PI)* 2018–2021
- UC Chancellor’s Fellowship; UCSC *\$11,000 (PI)* 2018–2020
- UCLA Dissertation Year Fellowship Academic year 2017–2018
- NASA Group Achievement Award 2017
- IPAC Visiting Graduate Student Fellowship 2016
- UCLA Physics & Astronomy Outstanding Teaching Award 2013
- Texas A & M University President’s Endowed Scholar 2007–2011

## SELECTED OUTREACH AND SERVICE ACTIVITIES

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- ExoPAG SIG 3 Member 2020 – current
- UCSC Equity & Inclusion Committee member 2018 – current
- UCLA Women in Physics & Astronomy (WIPA) Outreach Coordinator 2015–2018
- UCLA WIPA Mentor to Undergraduate Students 2014–2018
- Impostor Syndrome Workshops *Co-Leader, 5 workshops* 2014–2017
- UCLA Planetarium Coordinator 2013–2018

## SELECTED TALKS

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- NASA ExoPAG 22, Virtual Meeting, June 2020
- NSF Astronomy & Astrophysics Postdoctoral Fellow Symposium, Honolulu, HI, January 2020
- Keck Science Meeting, Los Angeles, CA, September 2019
- Lowell Observatory Colloquium, Flagstaff, AZ, May 2019
- Tech Talk Seminar, UH Hilo, Hilo, HI, December 2018
- SPIE Astronomical Telescopes and Instrumentation Conference, Austin, TX, June 2018
- Rising Stars in Physics Workshop, MIT, Cambridge, MA, April 2018

## SELECTED PUBLICATIONS

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- Hood C. E., Fortney J. J., Line M. R., **Martin E. C.**, et al., “Prospects for Characterizing the Haziest Sub-Neptune Exoplanets with High Resolution Spectroscopy”, 2020, *ApJ in press*, arXiv:2008.11299
- M.-G. Suh, X. Yi, Y.-H. Lai, S. Leifer, I. S. Grudinin, G. Vasisht, **E. C. Martin**, et al., “Searching for Exoplanets Using a Microresonator Astrocomb.” 2019, *Nature Photonics*, 13, 25-30.
- J. D. Kirkpatrick, **E. C. Martin**, R. L. Smart, et al., “Preliminary Trigonometric Parallaxes of 184 Late-T and Y Dwarfs and an Analysis of the Field Substellar Mass Function into the ‘Planetary’ Mass Regime.” 2019, *ApJS*, 240, 19
- **E. C. Martin.**, M. P. Fitzgerald, I. S. McLean, et al., “An Overview of the NIRSPEC Upgrade for the Keck II Telescope.” 2018 SPIE Proceedings
- **E. C. Martin**, J. D. Kirkpatrick, C. A. Beichman, et al., “Y Dwarf Trigonometric Parallaxes from the Spitzer Space Telescope.” 2018, *ApJ*, 867, 109
- S. E. Logsdon, G. N. Mace, I. S. McLean, **E. C. Martin.** “Probing Late-type T dwarf  $J - H$  Color Outliers for Signs of Age.” 2018, *ApJ*, 867, 96
- **E. C. Martin**, G. N. Mace, I. S. McLean, et al., “Surface Gravities for 228 M, L, and T dwarfs in the NIRSPEC Brown Dwarf Spectroscopic Survey.” 2017, *ApJ*, 838, 73.
- **E. C. Martin**, M. P. Fitzgerald, I. S. McLean, E. Kress, E. Wang. “Optical Design of the Slit-Viewing Camera for the NIRSPEC Upgrade.” 2016 Proceedings SPIE.
- X. Yi, K. Vahala, J. Li, et al., (incl **E. C. Martin**), “Demonstration of a Near-IR Line-Referenced Electro-Optical Laser Frequency Comb for Precision Radial Velocity Measurements in Astronomy.” 2016, *Nature Communications*, 7, 10436.
- **E. C. Martin**, M. P. Fitzgerald, I. S. McLean, S. M. Adkins, T. Aliado, G. Brims, C. Johnson, K. Magnone, E. Wang, J. Weiss. “Performance Modeling of an Upgraded NIRSPEC on Keck.” 2014 Proceedings SPIE.
- **E. C. Martin**, D. L. DePoy, J. L. Marshall. “Optical Design of a Red Sensitive Spectrograph.” 2012 Proceedings SPIE.