

# Brittany E. Miles

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## Education

2019 – present	PhD, Astronomy & Astrophysics, University of California, Santa Cruz
2016 – 2018	M.S, Astronomy & Astrophysics, University of California, Santa Cruz
2011 – 2016	B.S., Physics, Geophysics and Planetary Physics Minor

## Fellowships

Current	NSF Graduate Research Fellowship
Current	Eugene Cota-Robles Graduate Fellowship
2016	UCSC Regents Graduate Fellowship
2016, 2017	National Association of University Women Graduate Fellowship
2016	Other Worlds Laboratory Graduate Fellowship
2015, 2016	Initiative for Maximizing Student Development Scholar
2015	CARE Fellow
2014	CARE Scholar
2011 – 2015	UCLA Black Alumni Winston C. Doby Legacy Scholar

## Awards and Honors

2020 Barbara Walker Best Paper Award  
2018 UCSC Astronomy Department Whitford Prize  
2018 Osterbrock Mini-Grant: Supporting Underrepresented Womxn-Identified Students on Their Path to Graduate School, \$3900  
Dean's Honor List (Winter 2015, Spring 2015, Winter 2016)

## First Author Publications

Miles, B.E., Hinz, P. M., Skemer, A. J., Martin, E.C., Stelter, R.D. (2021) "Testing a 10 micron HgCdTe Detector for Ground-Based Exoplanet Science", SPIE Proceedings Volume 11823

Miles, B. E., Skemer, A. J. I., Morley, C. V., Marley, M. S., Fortney, J.J. , Allers, K.N., Faherty, J. K., Geballe, T. R., Visscher, C., Schneider, A. C., Lupu, R., Freedman, R. S. , Bjoraker, G. L. (2020) "Observations of Disequilibrium CO Chemistry in the Coldest Brown Dwarfs" AJ, 160, 63

Miles, B. E., Skemer, A. J., Barman T. S., Allers, K. N., Stone, J. M. (2018) "Methane in Analogs of Young, Directly Imaged Exoplanets", ApJ, 869, 18

Miles, B. E., & Shkolnik, E. L. (2017). "HAZMAT II: Ultraviolet Variability of Low-Mass Stars in the GALEX Archive", AJ, 154, 67

Miles, B. E., Roberge, A., & Welsh, B. (2016). "UV Spectroscopy of Star-Grazing Comets Within the 49 Ceti Debris Disk.", ApJ, 824, 126

### **Talks**

Sept 2021 Atmospheric Mixing in Cool Exoplanet Analogs  
Stars and Exoplanets Seminar  
University of Hawaii

Aug 2021 Testing a 10 micron HgCdTe Detector for Ground-Based Exoplanet Science  
SPIE Optics and Photonics  
San Diego Convention Center

April 2021 Choosing a Dewar for Mid-IR Detector Testing  
Graduate Student Postdoc Seminar  
UC Berkeley

April 2021 Testing a 13 $\mu$ m cutoff HgCdTe Detector for Ground Based Astronomy  
Lunch Seminar  
UC Berkeley

April 2021 Atmospheric Mixing in Cool Exoplanet Analogs  
Astronomy Seminar  
University of Connecticut

Dec 2020 Atmospheric Mixing in Cool Exoplanet Analogs  
Exoplanet Talk Seminar  
The Ohio State University

Dec 2020 Atmospheric Mixing in Cool Exoplanet Analogs  
Planetary Science Seminar  
UC Berkeley and UCLA

Dec 2020 Atmospheric Mixing in Cool Exoplanet Analogs  
Planetary Science Seminar  
California Institute of Technology

Oct 2020 Testing a 13 $\mu$ m cutoff HgCdTe Detector for Ground Based Astronomy  
Network of Young Researchers in Instrumentation for Astronomy

Aug 2020 Atmospheric Mixing in Cool Exoplanet Analogs  
Star, Planets, and Formation Summer Speaker Series  
University of Michigan

Aug 2020 Atmospheric Mixing in Cool Exoplanet Analogs  
Exoplanet Journal Club, JPL

Jun 2020 M-band Observations of the Coldest Brown Dwarfs  
ExoPAG 22

Feb 2020 Disequilibrium CO Chemistry in the Coldest Brown Dwarfs  
Exo Update, UT Austin

Oct 2019 Non-Equilibrium CO Chemistry in the Coldest Brown Dwarfs  
BDEXOCON

Sept 2019 Non-Equilibrium CO Chemistry in the Coldest Brown Dwarfs  
Bay Area Exoplanet Science Meeting

Sept 2018 Methane in Analogs of Young Directly Imaged Exoplanets  
Keck Science Meeting

Mar 2017 HAZMAT II: UV Variability of M Dwarfs in the GALEX Archive  
Bay Area Exoplanet Science Meeting

Apr 2016 Measuring the Ultraviolet Variability of M Dwarfs with GALEX  
LA Basin Earth and Planetary Sciences Student Research Symposium

Jan 2016 Measuring the Ultraviolet Variability of M Dwarfs with GALEX  
227th American Astronomical Society Meeting

July 2014 HST STIS Data of the 49 Ceti Debris Disk  
National Capitol Area Disks Meeting 5, Carnegie DTM

### **Teaching Experience**

Spring 2020 TA - ASTR 3 Introductory Astronomy: Planetary Systems  
Spring 2019 TA - ASTR 9 Introduction to Research in Physics and Astrophysics

### **Observing Experience**

Keck Observatory: NIRSPEC (4 nights), NIRES (2 nights)  
Gemini Observatory: GNIRS, 2018B (PI, 2 hours), 2016B and 2017A (50 queue mode hours)