# ROMY RODRÍGUEZ MARTÍNEZ

140 West 18th Ave. Columbus OH, 43210 +1 787 598 8674  $\diamond$  rodriguezmartinez.2@osu.edu

# RESEARCH INTERESTS/GOALS

I am interested in the detection and characterization of extrasolar planets. My chief research goals are to combine precise measurements of exoplanets's masses and radii with the chemical abundances of their host stars to constrain the structure and composition of small exoplanets.

# **EDUCATION**

PhD, Astronomy

August 2017 - Present

The Ohio State University

Master of Science, Physics August 2015 - June 2017

University of Puerto Rico, Río Piedras

Bachelor of Science, Physics August 2009 - May 2015

University of Puerto Rico, Río Piedras

#### **PUBLICATIONS**

# 7 total: 5 first author

- 7. Rodíguez Martínez, R., Stevens, D.J., Gaudi, B.S., Panero, W., "Analytic Estimates of the Achievable Precision on the Physical Properties of Transiting Planets using Purely Empirical Measurements", in preparation
- 6. Godoy-Rivera, D., Tayar, J., Pinnsonneault, M., **Rodíguez Martínez, R.**, et al., "Testing the Limits of Precise Subgiant Characterization with APOGEE and Gaia: Opening a Window to Unprecedented Astrophysical Studies", Submitted to the Astrophysical Journal
- 5. Rodíguez Martínez, R., Gaudi, B.S., Rodriguez, Joseph E., "KELT-25b and KELT-26b, a Hot Jupiter and a Substellar Companion Transiting Young A-stars observed by TESS", Astronomical Journal
- 4. Rodriguez, J. E., Eastman, J. D., Zhou, G., et al., "KELT-24b: A  $5M_J$  Planet on a 5.6 day Well-Aligned Orbit around the Young V=8.3 F-star HD 93148", Astronomical Journal
- 3. Rodíguez Martínez, R., Lopez, L., Shappee, B., Kochanek, C.S., Jayasinghe, T., Schmidt, S., "A Catalog of Flares on M dwarfs with ASAS-SN", Astrophysical Journal
- 2. Rodíguez Martínez, R., Ballard, S., Mayo, A., Vanderburg, A., Montet, B., Christiansen, J. L., "Characterization of Low Mass K2 Planet Hosts Using Near-Infrared Spectroscopy", Astronomical Journal,
- 1. Rodíguez Martínez, R., Schmidt, S. J., Jayasinghe, T., Stanek, K. Z., Prieto, J. L., Shappee, B., Kochanek, C.S., Thompson, T. A., Holoien, T. W.-S., Bersier, D., Brimacombe, J., "ASASSN-18di: Discovery of a Powerful Flare on a Mid-M Dwarf", Research Notes of the American Astronomical Society

# TALKS PRESENTED

"Finding Flares with ASAS-SN" (invited talk at Cool Stars conference 2020) Cancelled due to COVID-19

"KELT-25b & KELT-26b: A hot Jupiter and a substellar companion transiting

young A-stars observed by TESS" (invited "Astronomy Tea" talk - Carnegie Observatories)

July 2020

"Searching for Hot Planets Around Hot Stars with the KELT Survey",

Harvard-Smithsonian Center for Astrophysics, Stars & Planets seminar (invited talk)

October 2019

# AWARDS AND HONORS

8 Hours Observing Time awarded at PEPSI Spectrograph on LBT

August 2020

Beth A. Brown Award for Best Graduate Poster Presentation

November 2018

Ann S. Tuttle Scholarship

September 2017

# TEACHING & ADVISING

Mentor for a high school student

Ohio State School for the Blind Mentorship Program

September 2020 - December 2020

Mentor for physics & astronomy undergraduate student

Polaris Mentorship Program

August 2019 - May 2020

University of Puerto Rico, Río Piedras, Intermediate Lab II,

Graduate Teaching Assistant (TA)

January 2016

University of Puerto Rico, Río Piedras, Introduction to Physics Lab I,

Graduate Teaching Assistant (TA)

August 2015

Math and Physics Tutor for Middle Schoolers

A tiempo tutoring center

August 2011

#### OUTREACH & SERVICE

Panelist for Women in Space

Q&A webinar for elementary school and high school students

September 2020

Panelist for *The Martian Monthly Movie Nights - Science Fiction vs Science Fact* 

Q&A webinar, Astronomy Department, OSU

August 2020

Invited speaker for the Planetary Habitability Lab's "AstroChat" series event

University of Puerto Rico Arecibo campus

December 2019

Invited speaker at elementary school Myrna M. Fuentes

Caguas, Puerto Rico

December 2019

Creator and co-organizer of symposium: "The Hunt for Alien Habitable Worlds"

Speakers: Sarah Ballard, Noemí Pinilla-Alonso, Abel Méndez,

University of Puerto Rico, Río Piedras

March, 2017

# PRESS COVERAGE

**ASAS-SN-18di** (Article on this paper were published in phys.org, medium.com, renfrewshireastro.co.uk, and others.)

April 2018

# POSTER PRESENTATIONS

Rodríguez et al., "Finding Flares with ASAS-SN", National Society of

Black Physicists Meeting

November 2018

Rodríguez et al., "Finding Flares with ASAS-SN", SACNAS - National Diversity in STEM October 2018

Rodríguez et al., "Characterization of Low-mass K2 planet hosts using

Near-Infrared Spectroscopy", 229th American Astronomical Society Meeting, #240.14

January 2017

Rodríguez et al., "Characterization of Low-mass K2 planet hosts using

# CONFERENCES ATTENDED

233rd American Astronomical Society Meeting, (Seattle, WA)	January 2019
National Society of Black Physicists, (Columbus, OH)	November 2018
SACNAS - National Diversity in STEM Conference, (San Antonio, TX)	October 2018
Planets around Hot Stars Meeting, (Nashville, TN)	June 2018
2nd Earth-Like Worlds Workshop, (Manati, PR)	February 2017
229th American Astronomical Society Meeting (Grapevine, TX)	January 2017
SACNAS - National Diversity in STEM Conference (Long Beach, CA)	October 2016
Astrobiology Science Conference (Chicago, II)	June 2015