### Martin A. Fernandez

University of California Riverside – 900 University Ave. – Riverside, CA 92521 – mfern027@ucr.edu

### **EDUCATION**

Currently: PhD Candidate in Physics, University of California Riverside.

Anticipated completion, June 2022.

M.S. in Physics	University of California Riverside	2018
B.S. in Physics	Western Washington University	2017

#### **RESEARCH**

- 2018 2021: Using cosmological simulations to explore beyond-standard-model physics and constrain cosmological & astrophysical parameters. Advised by Dr. Simeon Bird (University of California Riverside).
- 2016 2017: Theory & modeling of guided wave plasmon polariton modes on novel waveguide architectures. Advised by Dr. Brad Johnson (Western Washington University).
- 2015 2017: Identifying & characterizing pre-main sequence double-lined spectroscopic binaries in young star forming environments. Advised by Dr. Kevin Covey (Western Washington University).

#### **PROGRAMMING SKILLS**

5+ years: Python and LATEX.

3+ years: High-performance computing (SLURM), including the use of TACC resources (Frontera,

Stampede2), and the XSEDE allocation system.

1+ years: C, Mathematica, IDL, and HTML/CSS.

### **AWARDS**

NSF GRFP (Graduate Research Fellowship Program)	2019 - 2022
UCR Chancellor's Distinguished Fellowship	2017
WWU Alumni Association Leader Scholarship	2016

## **TEACHING**

UCR Teaching Assistant, Physics 2LC: Waves & Optics	2018
WWU Teaching Assistant, Tools and Data Analysis	2016 & 2017
WWU Teaching Assistant, Classical Mechanics	2016

# **OUTREACH**

Advisor/mentor for high school student	2018 - 2020
Currently at UC Berkeley studying computer science.	
UCR Physics Organization for Women and the UnderRepresented	2018 - 2020
Served as treasurer for 2019.	
WWU Public Night Sky Observing host	2015-2017
WWU Women in Physics	2015 - 2017

Volunteer/Organizer for outreach events, including: GEMS Fair (2016, 2017), GEMS Academy (2017), Compass2Campus (2015, 2016), Scouting for Science (2016, 2017), March for Science (2017), Mix it Up (2015, 2016).