

Jennifer V. Medina

Research and Instrument Analyst
Hubble Space Telescope
jmedina@stsci.edu | 786-338-1462

EDUCATION

FLORIDA INTERNATIONAL UNIVERSITY | B.S. IN PHYSICS WITH MINOR IN ASTRONOMY

May 2017 | Miami, FL

Advisor: Dr. Walter Van Hamme

INTERNSHIPS AND WORK EXPERIENCE

RESEARCH AND INSTRUMENT ANALYST I | SEP 2017 - PRESENT

Supervisor: Max Mutchler | Space Telescope Science Institute, Baltimore, MD

- Work involves performing functional work for Hubble's Wide Field Camera 3 (WFC3) instrument.
- Creating and maintaining software to aid in the production of calibration files used by the astronomy community.
- Providing developmental support for the Exoplanet Characterization Tool Kit (ExoCTK) software team.

TAURUS RESEARCH SCHOLAR | JUN 2016 - AUG 2016

Advisor: Dr. Andrew Mann | University of Texas, Austin, TX

- REU Program for undergraduate students pursuing a career in Astronomy.
- Developed a program in Python to accurately calculate the inclination of host stars in extra-solar planet systems in the Praesepe star cluster.
- Development involved data reduction, modeling, statistical analysis, data interpretation, and collaboration with other scientists.

TELESCOPE OPERATOR | MAY 2016 - PRESENT

Supervisor: Dr. James Webb | Stocker Observatory, Miami, FL

- Work involves setting up telescopes and speaking to the public on the topic of astronomy.
- Responsibilities include maintaining the telescopes, taking images with a 24" reflector telescope, and reducing them using the MIRA imaging program.
- Work also involves teaching students how to use and set up a motored reflector telescope, and providing tours of the Observatory.

UNDERGRADUATE RESEARCH ASSISTANT | MAY 2015 - JUN 2016

Advisor: Dr. Walter Van Hamme | Florida International University, Miami, FL

- KEPLER light curves of the HAT-P 7 and HAT-P 11 binary systems were extracted from NASA archives and analyzed with GNUplot using a program developed on UNIX.
- Using this data, parameters and characteristics of the star-planet system were calculated and compared to literature values.

LEARNING ASSISTANT: PHYSICS I AND II | AUG 2014 - JAN 2017

Supervisor: Dr. Xuewen Wang | Florida International University, Miami, FL

- Work involved helping students understand fundamental concepts from the lecture through experiments in the laboratory.
- Mentored groups of students and conducted one-on-one teaching.
- Other tasks included setting up equipment and preparing software for the students to use in their data analysis.

PUBLICATIONS

ANDREW W. MANN, ERIC GAIDOS, ANDREW VANDERBURG, AARON C. RIZZUTO, MEGAN ANSDELL, JENNIFER VANESSA MEDINA, GREGORY N. MACE, ADAM L. KRAUS, KIMBERLY R. SOKAL
(2017) "Zodiacal Exoplanets in Time (ZEIT). IV. Seven transiting planets in the Praesepe cluster"
Volume 153, Number 2
Published on: The Astronomical Journal (AJ)
[Available Here](#)

SKILLS

Programming and Software	Python, \LaTeX , HTML, MIRA Editing Software, Microsoft Office, GNUplot FORTRAN, R, Matlab
OS	Windows iOS, LINUX
Technical Languages	Data Analysis, Image Reduction, Statistical Interpretation, Problem Solving English (Fluent), Spanish (Fluent), French (Some)

CONFERENCES

SACNAS | SAN ANTONIO, TX | 2018

Presented:

APS CUWIP | BOULDER, CO | 2017

Presented: "Calculating $V_{\sin(i)}$ of Young Planet-hosting Stars" Poster

AAS | GRAPEVINE, TX | 2017

Presented: "Calculating $V_{\sin(i)}$ of Young Planet-hosting Stars" Poster

SESAPS | BLACKSBURG, VA | 2016

Presented: "Calculating $V_{\sin(i)}$ of Young Planet-hosting Stars" Poster

CURFIU | MIAMI, FL | 2016

Presented: "The HAT-P 7 and HAT-P 11 Star-Planet Systems" Poster

APS CUWIP | ATLANTA, GA | 2016

Attended

APS | BALTIMORE, MD | 2015

Attended

OBSERVING EXPERIENCE

Keck Observatory	Mauna Kea, HI	Keck 2 (NIRC2)
McDonald Observatory	Fort Davis, TX	2.7m Cassegrain Telescope (IGRINS)
Stocker Observatory	Miami, FL	0.6m Ritchey-Chretien Telescope

MEMBERSHIPS AND LEADERSHIP POSITIONS

2017	President	FIU Astronomy Club
2016	President	Society for the Advancement of Women in STEM
2016	Member	American Astronomical Society
2015	Member	Sigma Pi Sigma Honor Society
2015	Member	American Physical Society
2014	Member	Society of Physics Students

AWARDS AND SCHOLARSHIPS

2017	2nd Place Winner	CUWiP Poster Competition
2016	Scholarship	TAURUS REU Program
2015	Scholarship	NSF S-STEM Program (Awarded, Not accepted)
2012	Scholarship	Florida Bright Futures
2012	Scholarship	FIU Academic Excellence