

ANDREIA JESSICA A. CARRILLO

andreiac@astro.as.utexas.edu

Department of Astronomy, University of Texas at Austin

EDUCATION

The University of Texas at Austin

Ph.D. Astronomy

August 2016 - Present

University of Michigan, Ann Arbor

B.S. Astronomy and Astrophysics and B.S. Interdisciplinary Physics

September 2012 - May 2016

RESEARCH EXPERIENCE

Chemo-kinematically characterizing TESS host stars

Advisor: Dr. Keith Hawkins

The University of Texas at Austin

Graduate Student

November 2018 - present

- Characterizing TESS host stars using *Gaia* DR2 and large spectroscopic surveys (APOGEE, GALAH, RAVE, LAMOST) to produce a catalogue of host star kinematics, abundances, and thin disk, thick disk, and halo membership probabilities.

**Assembly history of the bulge, the bar,
and the disk with VENGA IFU Survey**

Advisor: Dr. Niv Drory and Dr. Shardha Jogee

The University of Texas at Austin

Graduate Student

September 2016 - present

- Studying the resolved stellar populations of the bulge, bar, and disk of nearby galaxies and their associated assembly histories using the VENGA IFU survey.

Characterizing dw1335-29, a dwarf satellite of M83

Advisor: Dr. Eric Bell

The University of Michigan, Ann Arbor

Undergraduate Student

2013 - 2016

- Used data from different images and catalogs (GHOSTS-HST, VISTA, SDSS, VIMOS-VLT) for reduction, photometry and analysis using various software and packages (IDL, IRAF, and DS9) to characterize a dwarf galaxy in the vicinity of M83.

Solar Observation Program

Advisor: Prof. Norman Marigza

Rizal Technological University (RTU), Philippines

Summer Intern

Summer 2013

- Involved in the departments Solar Observation Program (SOP) that kept track of solar activities through sunspot cataloging. RTU is the only university in the Philippines offering a degree in Astronomy.

PUBLICATIONS

1. *Know thy star, know thy planet: Chemo-kinematically characterizing TESS host stars*
Andreia Carrillo, Keith Hawkins, Brendan Bowler. In prep, to be submitted Spring 2019
2. *The VIRUS-P Exploration of Nearby Galaxies (VENGA): Assembly History of the Bulge, Bar, and Disc of NGC 2903*
Andreia Carrillo, Shardha Jogee, Niv Drory, Kyle Kaplan, Tim Weinzirl, Guillermo Blanc, Rongxin Luo, Mimi Song, and the VENGA Collaboration. In prep, to be submitted Spring 2019

3. *Characterizing dw1335-29, a Recently Discovered Dwarf Satellite of M83*
Andreia Carrillo, Eric F. Bell, Jeremy Bailin, Antonela Monachesi, Roelof S. de Jong, Benjamin Harmsen, and Colin Slater, 2017, MNRAS, 465, 5026
4. *Aiming High: Astronomy Undergraduate Education at 6,800 Feet*
Andreia Carrillo, 2015, Mercury Vol. 44 No. 4, p. 25

POSTERS AND PRESENTATIONS

1. **Andreia Carrillo**, Shardha Jogee, Kyle Kaplan, Tim Weinzirl, Guillermo Blanc, Rongxin Luo, Mimi Song, Frank N. Bash Symposium, October 24-25, 2017
2. **Andreia Carrillo**, Shardha Jogee, Kyle Kaplan, Tim Weinzirl, Guillermo Blanc, Rongxin Luo, Mimi Song, 230th American Astronomical Meeting, June 4-8, 2017
3. **Andreia Carrillo**, Eric F. Bell, Jeremy Bailin, Antonela Monachesi, Colin Slater, 227th American Astronomical Meeting, January 4-8, 2016

AWARDS AND DISTINCTIONS

- Astronomy and Astrophysics, Highest Honors *April 29, 2016*
- University of Michigan Astronomy Department Outreach Excellence Award *April 29, 2016*
- University Honors *Fall 2012, 2014, 2016*
- William J. Branstrom Freshman Prize Award *March 17, 2013*

TEACHING

Teaching Assistant: Freshman Research Initiative *Fall 2019*
 TA and mentor for undergrads starting on Astronomy research, *UT Austin*

Teaching Assistant: Astronomy 307 *Fall 2017 & 2018*
 Introductory Astronomy class for undergrad STEM majors, *UT Austin*

Instructor: Astronomy Structured Study Group *Fall 2016*
 Designed and taught a discussion class catered to the 100-level astronomy students for Honors credit, *University of Michigan*

SERVICE AND OUTREACH

Girl Day at UT *Spring 2017, 2018, 2019*
UT Austin

Participated in and organized the Association of Women in Astronomy Research and Education's Discover Astronomy demos and activities for Girl Day, attended by over 8,000 elementary and middle school students.

Grad-Undergrad Mentoring Program *Spring 2019*
Department of Astronomy, UT Austin

Started a mentoring program for undergrads where they are paired with a graduate student mentor to help them navigate their careers in Astronomy

Physics Circus *Spring 2018 - present*
Physics Department, UT Austin

We go around different elementary and middle schools and do a free Physics show where we teach kids about different states of matter, the atmosphere, and electricity.

Astro-coffee/python online workshop

Fall 2018 - present

One of the organizers for an online platform for the Filipinos interested in Astronomy to learn about python for research and hear about other people's research experience on astronomy and meteorology through online invited talks.

TAURUS graduate student mentor

Summer 2017 & 2018

Department of Astronomy, UT Austin

Served as a graduate student mentor for the Texas Astronomy Undergraduate Research experience for Under-represented Students (TAURUS).

Astronomy Undergraduate Poster Session organizer

Spring 2015 & 2016

Department of Astronomy, University of Michigan

Annual poster session showcasing the undergraduate students researches; Successfully increased the number of participants from 12 from the previous year to 18 in 2015 and 30 in 2016.

Starburst 6 speaker

Summer 2013

Camarines Sur Polytechnic Colleges, Philippines

Starburst is Rizal Technological University's Outreach program where stargazing and astronomy seminars are conducted in other schools. I talked about my involvement in RTU's Summer Observation Program