LAURA D. VEGA CURRICULUM VITAE

Heising-Simons Astrophysics Postdoctoral Launch Program Fellow

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University of Maryland, College Park

Department of Astronomy

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Exoplanets and Stellar Astrophysics Laboratory

& Center for Research and Exploration in Space Science and Technology II (CRESST II)

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Summary

Astrophysicist with a PhD specializing in multiwavelength astronomy, currently focused on M-dwarf stellar flares (postdoctoral work), with prior multiwavelength research in late-stage stellar evolution (dissertation). Experienced in leading and contributing to scientific publications, demonstrating adaptability in research focus. Skilled in data analysis, public speaking, and outreach. Passionate about sharing knowledge and collaborating on diverse research projects to advance our understanding of stellar physics.

Employment & Education

May 2021 – Jul. 2025

The University of Maryland, College Park & NASA Goddard Space Flight Center

NASA Harriett G. Jenkins Pre-doctoral Fellow

Aug. 2015 – Apr. 2020

Email: Idvega@umd.edu

Fisk University & Vanderbilt University

Fisk-Vanderbilt Masters-to-PhD Bridge Program Fellow

Aug. 2014 – Apr. 2021

Fisk University & Vanderbilt University

Undergraduate Research Assistant

May 2010 – Jul. 2014

The University of Texas at San Antonio (UTSA)

Astrophysics Ph.D., 2021 – Vanderbilt University

Advisor: Keivan G. Stassun

Dissertation Title: Stellar Evolution at the Crossroads: Resolving the Nature of RV Tauri Variable Systems Using Unprecedented Observations from the Kepler and XMM-Newton Space Telescopes

Physics M.A., 2017 – Fisk University

Advisor: Keivan G. Stassun

Thesis Title: Evidence for Binarity and Disk Obscuration in Kepler Observations of the Pulsating RV Tau Variable Star DF Cygni

Physics B.Sc., 2013 – The University of Texas at San Antonio *Advisor:* Eric M. Schlegel

Relevant Skills

Languages: English; Spanish

Computer: Unix; Python; LaTeX; Pandas; Astropy; Lightkurve; HEASARC:FTOOLS,

XSPEC;

SAOImage DS9

Data experience: X-ray/Ultraviolet (NICER, Swift); Optical (Kepler, TESS, AAVSO, DASCH),

and Radio (VLA) time series

Writing Skills: Technical writing; Proposal writing

Grants/Fellowships

Heising-Simons Foundation Future Faculty Launch Program Postdoctoral Fellowship 2021 - 2025

NASA Sellers Exoplanet Environments Collaboration (SEEC) Internal Scientist Funding Model (ISFM) Mini-Proposals (Role: **Co-I**; PI: A. Mandell, Total Budget: \$50K) 2024 - 2025

NASA Astrophysics Data Analysis (ADAP) (Role: **Co-I**; PI: J. Schlieder, Total Budget: \$62K)

NASA TESS Cycle 4 GI Program (Role: **PI**, Total Budget: \$70K) 2021 - 2022 NASA TESS Cycle 3 GI Program (Role: **PI**, Total Budget: \$50K) 2020 - 2021

NASA OSTEM Minority University Research Education Project (MUREP)/Advanced STEM Training and Research (ASTAR): Harriett G. Jenkins Pre-doctoral Fellowship 2015 - 2020 Smithsonian Latino Center - LIP (Research at the Center for Astrophysics and Outreach at the National Air & Space Museum)

2017, 2018, 2019

UTSA Vaughan Family Grant (AAS Conference Travel) 2011, 2012, 2014

National Institute on Minority Health and Health Disparities – Nanotechnology and Human Health Core Grant (2012 Summer Undergraduate Nanoparticles Research at UTSA) 2012 Bill & Alicia Hoover Grant (For 2010 Summer Research at UTSA) 2010

Service

NASA Fellows and Scholars Alumni at the Southern Regional Education Board (SREB)
Institute on Teaching and Mentoring, Panelist

NASA Astrophysics Theory Program (ATP), Review Panel Member

NASA Fellowship Activity Peer Review Panel, Executive Scribe

NASA TESS18 Review Panel, Scribe

NASA en Español, English-to-Spanish Text Translator (occasional)

2018 - Present

Honors and Awards

Most Outstanding Student Publication - Vanderbilt Physics & Astronomy Department 2018	
NASA Office of Education's MUREP: Harriett G. Jenkins Pre-doctoral Fellow	2015
Best Poster in Physics - Fisk University Science Symposium	2016
Toastmasters International - Competent Leader	2015
Toastmasters International - Competent Communicator	2015
The Sam Madrid Jr. Endowed Scholarship - UTSA	2012
The Dr. B. Thyagarajan Endowed Scholarship - UTSA	2009

Dean's List - UTSA Honor Roll - UTSA 2007, 2008 2009, 2010, 2011

Publications ([Number] = Number of citations for refereed papers as of CV's date-of-update)

- 18. Vega L. D. et al., In Prep.; Simultaneous TESS and Swift Observations of Wolf 359.
- **17. Vega L. D. et al. 2025, In Prep.**; From Radio to X-ray: Tracing the flares of YZ Canis Minoris Across the Spectrum.
- **16.** Tovar-Mendoza, G. et al. (2025, in prep.); Chispas de Luz: Stellar Flare Yields with the Nancy Grace Roman Space Telescope.
- **15.** MacGregor et al. 2025, Submitted.; *Millimeter Flare Rates from M Dwarfs Measured by ALMA*.
- **14.** Barclay, T. et al. 2025; *The transmission spectrum of the potentially rocky planet L 98-59 c* The Astronomical Journal, 169, 241. [14]
- 13. Howard, W. S. et al. 2024; Preparing for the Early eVolution Explorer: Characterizing the Photochemical Inputs and Transit Detection Efficiencies of Young Planets Using Multiwavelength Flare Observations by TESS and Swift, The Astronomical Journal, 169, 27. [2]
- **12.** Paudel R. R. et al. 2024; A Multiwavelength Survey of Nearby M Dwarfs: Optical and Near-ultraviolet Flares and Activity with Contemporaneous TESS, Kepler/K2, Swift, and HST Observations, The Astrophysical Journal, 971, 24. [8]
- **11.** Tovar-Mendoza, G. et al. 2023; Enabling Stellar Flare Science in the Roman Galactic Bulge Survey: Cadence, Filters, and the Read-Out Strategy Matter, Roman Core Community Survey White Paper. [1]
- **10.** Wittrock, J. M. et al. 2023; *Validating AU Microscopii d with Transit Timing Variations*, The Astronomical Journal, 166, 232. [19]
- **9.** Chavali, S. et al. 2022; *A Pilot Survey of an M Dwarf Flare Star with Swift's UV Grism*, Research Notes of the AAS, 6, 201. [6]
- **8.** Wittrock, J. M. et al. 2022; *Transit Timing Variations for AU Microscopii b and c*, The Astronomical Journal, 164, 27. [18]
- **7.** Gilbert, E. A. et al. 2022; *Flares, Rotation, and Planets of the AU Mic System from TESS Observations*, The Astronomical Journal, 163, 147. [60]
- **6.** Paudel, R. R. et al. 2021; *Simultaneous Multiwavelength Flare Observations of EV Lacertae*, The Astrophysical Journal, 922, 31. [33]
- **5. Vega, L. D. et al. 2021**; Multiwavelength Observations of the RV Tauri Variable System U Monocerotis: Long-Term Variability Phenomena Can Be Explained by Binary Interactions With a Circumbinary Disk, The Astrophysical Journal, 909, 138. (NASA Feature). [5]

- Gilbert, E. A. et al. 2020; The First Habitable Zone Earth-sized Planet from TESS.
 I: Validation of the TOI-700 System, The Astronomical Journal, 160, 116. (NASA Feature). [107]
- Kostov, V. B. et al. 2019; The L 98-59 System: Three Transiting, Terrestrial-size Planets Orbiting a Nearby M Dwarf, The Astronomical Journal, 158, 32. (NASA Feature). [112]
- 2. Vega, L. D. et al. 2017; Evidence for Binarity and Possible Disk Obscuration in Kepler Observations of the Pulsating RV Tau Variable DF Cygni, The Astrophysical Journal, 839, 48. [15]
- 1. Schlegel, E. M. et al. 2016; NGC 5195 In M51: Feedback 'Burps' After a Massive Meal?, The Astrophysical Journal, 823, 75. (NASA Feature). [11]

Leadership & Outreach

Public Talks & Engagement

- We asked a NASA expert (Spanish) Speaker Apr. 2024
 Recorded an educational video with @NASAenEspañol titled: "¿Qué tan grande es el espacio? (Just how large is space?)."
- Astronomy on Tap (AoT) Baltimore, Guilford Hall Brewery, Baltimore, MD Jan. 2024

General Public Talk: "Stellar Cheers: A Toast to the Eccentricities of RV Tauri Binary Stars."

- - demic journey and research. Delivered a formal scientific talk to professors and graduate students at the university.
- The Roman Space Observer
 Twitch stream (Spanish version) interview with @NASAenEspañol to promote NASA's retro 8-bit Roman Space Observer video game and to discuss some of the science The Nancy Grace Roman Space Telescope will do.
- NASA Hyperwall, Honolulu, HI

 "Astrophysics with TESS" presentation at American Astronomical Society, AAS 235th Meeting.

Committee Work & Mentoring

Graduate Resources Advancing Diversity with Maryland Astronomy and Physics (GRAD -MAP) Winter Workshop - Presenter
 Presentations to GRAD-MAP student about my career path and annual informational presentation on "Post Bacs, Masters, and Bridge Programs."

- University of Maryland's TerrapinSTRONG Program Facilitator Sep. 2022
 Trained and facilitated on-boarding sessions for new undergraduate students in the College of Computer, Mathematical, and Natural Sciences, engaging students in conversations to foster a sense of belonging and connection within the UMD community.
- Fisk-Vanderbilt Bridge Program at SACNAS, Long Beach, CA Recruiter Oct. 2016
 Booth at SACNAS to recruit undergraduate student for the Fisk-Vanderbilt Bridge Program.
- DCA Stars at The University of Maryland College Park Member Summer 2016
 Students and mentors met weekly and discussed our research, goals, setbacks, and successes.
- Inclusive Astronomy Conference at Vanderbilt, Nashville, TN Jun. 17–19, 2015 Volunteer host member for the inaugural conference on diversity and inclusion.
- Astronomy Torus 2012 Workshop at UTSA, San Antonio, TX Dec. 5–7, 2012
 International workshop focused on active galactic nuclei; Local Organizing Committee Member: Logistics planning; Registration desk.

Youth Outreach & Educational Events

- Barrera Veterans Elementary's Career Day Astronomy Chat May 2019, 2025
 Shared experiences in astronomy with students across different grade levels in Von Ormy, TX.
- Ed Cody Elementary STREAM Night Community Event Jan. 2025 Engaged students and parents in an interactive Astronomy Chat at this community event, using a projector to showcase cosmic images while discussing planets, galaxies, and the universe at Cody Elementary in San Antonio, TX.
- Escuela Primaria Federal Emiliano Zapata Astronomy Chat
 Engaged students and parents in an interactive Astronomy Chat titled, "Nuestro Domicilio Còsmico" (Our Cosmic Address) in Spanish. Paradillas, Zacatecas, MX.
- Society of Physics Students and SACNAS student chapters Feb. 2023 Invited Talk: My Journey to the PhD; San Antonio College, San Antonio, TX.
- Colorado Springs Cool Science Festival Zoom-a-Scientist
 Oct. 2020
 Virtual sessions with elementary students in Fairbanks, AK and Colorado Springs,
 CO, discussing astronomy.

Smithsonian National Air & Space Museum - Volunteer Astronomer Oct. 2017
 Present

Engaged in Astronomy Chats and Hispanic Heritage Month Outreach Familia Day in Washington, DC.

- Bancroft Elementary Saturday Academy Astronomy Chat
 Visited bilingual Latinx students to discuss astronomy, in collaboration with the Smithsonian Air & Space Museum and sponsored by the Smithsonian Latino Center in Washington, DC.
- Smithsonian Astrophysical Observatory's Rising Stars Camp Astronomy Chat Jul. 2018

Led activities using robotic telescopes and gave a research talk on star lifecycles at St. Katharine Drexel in Roxbury Crossing, MA.

Other Contributions & Leadership

- Toastmasters International

 Vice President of Public Relations at Goddard Toastmasters (06/2022 2024) and Vanderbilt Toastmasters (05/2015 2018); Treasurer at UTSA Roadrunner Toastmasters (01/2014 07/2014). As a member, I deliver prepared and extemporaneous speeches, evaluate other members' speeches, and take on leadership roles during meetings.
- The Physics Honor Society | Sigma Pi Sigma at UTSA Apr. 2013 Jan. 2014
 Founding officer (President) for the The Physics Honor Society chapter at UTSA. I helped organize study sessions for the Physics GRE and tutored students in physics and math.
- Society of Physics Students at UTSA
 Public Relations Officer: Created promotional materials, managed social media, and organized monthly outreach events like UTSA's "Friday Nights, Celestial Lights."

 I also helped lead various STEM outreach events for high school and elementary school students.

ACCEPTED Observing Proposals

20. TESS Cycle 6 GI Program

Jan. 2024

Study Of Optical/Near-Ultraviolet Energy Fractionation In Stellar Flares Using Simultaneous 20-s TESS And Swift NUV Data

Role: Co-I, PI: Rishi Paudel

19. ALMA Cycle 9 GI Program

Apr. 2022

The Origin and Impact of Flares in M Dwarf Systems

Role: Co-I, PI: Meredith MacGregor

18. TESS Cycle 5 GI Program

Jan. 2022

Multiwavelength TESS-Swift-NICER Observations of Pulsations in Flares on Solar-Type Stars

Role: Co-I, PI: Teresa Monsue

17. Swift Cycle 18 GI Program

Sep. 2021

A Swift and Alma View of the Origin and Impact of M-Dwarf Flares

Role: Co-I, PI: Ward Howard; Total Budget: \$35K

16. TESS Cycle 4 GI Program

Jan. 2021

Exploring the Star-planet Connection via Simultaneous Tess and Swift Observations of Highly Active M Dwarfs

Role: PI, PI: Vega, L. D.; Total Budget: \$70K

15. TESS Cycle 4 GI Program

Jan. 2021

Using Tess 20-S Cadence Data To Study Flares On M Dwarfs

Role: Co-I, PI: Rishi Paudel; Total Budget: \$70K

14. NICER Cycle 3 GI Program

Nov. 2020

A Study of M Dwarf Flares Using Simultaneous High Cadence Multi-wavelength Data

Role: Co-I, PI: Rishi Paudel

13. XMM-Newton - Announcement of Opportunity 20

Oct. 2020

Pilot Study of RV Tau Variables: A new class of X-ray emitting stars?

Role: Co-I, PI: Rodolfo Montez Jr.

12. Hubble Space Telescope Cycle 28 GO Program

Oct. 2020

Confirming a Tentative Detection of an Atmosphere Around a Potentially Rocky Planet

Role: Co-I, PI: Thomas Barclay

11. Swift Cycle 16 GI Program

Sep. 2020

Defining the Energy Budget for Abiogenisis on M-dwarf Planets

Role: Co-I, PI: A. Youngblood; Total Budget: \$35K

10. Swift - Target of Opportunity

Jul. 2020

20 kilo-second UVOT observations of the AU Mic system

Role: PI, PI: Vega, L. D.

9. Joint TESS-Swift Cycle 3 GI Program

Jan. 2020

Exploring the Star-Planet Connection via Simultaneous TESS and Swift Observations of Highly Active M Dwarfs

Role: PI, PI: Vega, L. D.; Total Budget: \$50K

8. TESS Cycle 3 GI Program

Jan. 2020

Discovering Circumbinary Planets With Tess

Role: Co-I, PI: Veselin Kostov; Total Budget: \$50K

7. NICER Cycle 2 GI Program

Nov. 2019

Multiwavelength Observations of Highly Active M Dwarfs

Role: Co-I, PI: Rishi Paudel

6. Hubble Space Telescope Cycle 27

Apr. 2019

Searching for Secondary Atmospheres in a System of Benchmark Worlds

Role: **Co-I**, PI: Thomas Barclay

5. NOAO - Center for High Angular Resolution Astronomy

Apr. 2019

Diving into the close stellar environment of the magnetic RV Tauri star U Mon

Role: Co-I, PI: Laurence Sabin

4. SAO - Submillimeter Array

Mar. 2019

Hunting for Disks Around Pulsating RV Tau Stars

Role: PI, PI: Vega, L. D.

3. SAO - Submillimeter Array Filler Program

Mar. 2019

Disks around RV Tauri Variable Stars: U Mon in High Resolution

Role: Co-I, PI: Rodolfo Montez Jr.

2. SAO - Submillimeter Array Filler Program

Oct. 2018

Disks around RV Tauri Variable Stars: U Mon (0.8 mm)

Role: Co-I, PI: Rodolfo Montez Jr.

1. SAO - Submillimeter Array Filler Program

Oct. 2018

Disks around RV Tauri Variable Stars: U Mon

Role: Co-I. PI: Rodolfo Montez Jr.

Oral Presentations

- **28.** *Invited Talk*: Catching Stellar Flares in the Act: A Coordinated Multiwavelength View of M Dwarf YZ CMi; Space Telescope Science Institute, Exoplanets, Star & Planet Formation Seminar, Baltimore MD, July 2025.
- 27. A Journey of Gratitude and Growth: The Impact of the Fisk-Vanderbilt Master's-to-PhD Bridge Program on My Path to the PhD; Special Session: Celebrating Bridge and Support Programs for Astronomy and Astrophysics Students, American Astronomical Society, AAS 245th Meeting, Washington, DC, Jan. 2025.
- **26.** From Radio to X-ray: Tracing the flares of YZ Canis Minoris Across the Spectrum; American Astronomical Society, AAS 245th Meeting, Washington, DC, Jan. 2025.

- **25.** From Radio to X-ray: Tracing the flares of YZ Canis Minoris Across the Spectrum; National Society of Black Physicists Conference; Houston, TX, Nov. 2024.
- **24. Invited Talk**: Updates on our Multiwavelength Observations Campaign of Active M Dwarf Stars with TESS, Swift, and NICER; NASA JPL Virtual Exoplanet Lecture Series; Virtual Meeting, Pasadena, CA, Mar. 2024.
- **23.** Exploring Flares in Simultaneous Multiwavelength Observations of Active M Dwarf Stars; NASA/CRESST II Retreat; University of Maryland, College Park, MD, Mar. 2024.
- **22.** Is the Flaring Star Wolf 359 a Good Exoplanet Host?; American Astronomical Society, AAS 243rd Meeting. New Orleans, LA, Jan. 2024.
- **21. Invited Talk**: Exploring Flares in Simultaneous Multiwavelength Observations of Active M Dwarf Stars; Penn State Center for Exoplanets and Habitable Worlds; State College, PA, Nov. 2023.
- **20. Invited Talk**: Exploring Flares in Simultaneous Multiwavelength Observations of Active M Dwarf Stars; National Society of Black Physicists Conference; Knoxville, TN, Nov. 2023.
- **19.** Exploring Flares in Simultaneous Multiwavelength Observations of Active M Dwarf Stars; Institute for Theory and Computation Luncheon; Harvard–Smithsonian Center for Astrophysics, Cambridge, MA, Nov. 2023.
- **18. Invited Talk**: My Research on RV Tauri Stars and M Dwarf Flares; Tecnológico de Monterrey Campus Sonora Norte, Hermosillo, Sonora, México, Oct. 2023.
- **17. Invited Talk**: Exploring RV Tauri Stars: A Study of DF Cygni and U Monocerotis; Mid-Hudson Astronomical Association, Virtual Meeting, SUNY-New Paltz, New Paltz, NY, Sep. 2023.
- **16.** Exploring Flares in Simultaneous Multiwavelength Observations of Wolf 359; Early Career Scientist Forum 2023, Sciences and Exploration Directorate 600, Goddard Space Flight Center, Greenbelt, MD, Sep. 2023.
- **15. Invited Talk**: Stellar Evolution at the Crossroads: Resolving the Nature of RV Tauri Stars using Multiwavelength Observations from Kepler, XMM-Newton, DASCH, AAVSO, and the SMA; Earth and Planets Laboratory Astronomy Seminar, Carnegie Institution for Science; Washington, DC, May 2023.
- **14. Invited Talk**: Simultaneous Multiwavelength TESS, Swift, and NICER Observations of Highly Active M Dwarf stars; NASA JPL Exoplanets Journal Club; Virtual Meeting, Pasadena, CA, Nov. 2022.
- **13.** Simultaneous Multiwavelength Observations of the Highly Active M Dwarf YZ CMi; SACNAS, San Juan, Puerto Rico, Oct. 2022.
- **12.** The APS Bridge Program and my journey to the PhD; Session L05: Experiences from the APS Bridge Program, APS April Meeting 2022, New York, NY, Apr. 2022.

- **11.** Multiwavelength observations of Highly Active M Dwarf stars using Swift, TESS, and NICER; Ultraviolet Science at Goddard, NASA Goddard Space Flight Center, Greenbelt, MD, Apr. 2022.
- **10.** Simultaneous Multiwavelength Swift, TESS, and NICER Observations of Highly Active M Dwarf Stars; Invited Talk Colloquium, Virtual Meeting, UTSA Department of Physics & Astronomy, San Antonio, TX, Apr. 2022.
- **9.** Resolving the Nature of RV Tauri Variable Systems Using Unprecedented Observations From the Kepler and XMM-Newton Space Telescopes; AAS Dissertation Talk, Stars IV Oral Session, AAS 238th Meeting. Virtual, Jun. 2021.
- **8.** Stellar Evolution at the Crossroads: Resolving the Nature of RV Tauri Variable Systems Using Unprecedented Observations from Kepler and XMM-Newton Space Telescopes; Invited Talk Colloquium, Virtual Meeting, Howard University, Washington, DC, Mar. 2021.
- Observations of Disks Around RV Tauri Variable Stars with the Submillimeter Array; SACNAS Conference, the Henry B. González Convention Center, San Antonio, TX, Oct. 2018.
- **6.** Evidence for Disk Obscuration in Kepler Observations of the RV Tau Star DF Cyg; 5th Annual Astrophysics Conference DC, The George Washington University, Washington DC, Jul. 2017.
- Kepler's Unprecedented High Temporal Precision Observations of the RV Tauri variable DF Cygni, Astronomy Journal Club, Vanderbilt University, Nashville, TN, Sep. 2016.
- **4.** M51 and the Effect of the Arm Resonance and Interaction on Diffuse X-ray Emission; American Astronomical Society, AAS 225th Meeting. Seattle, WA, Jan. 2015.
- **3.** Cosmic Background Radiation and the Evolution of the Universe; UTSA's Friday Nights, Celestial Lights Series. San Antonio, TX, Apr. 18, 2014.
- 2. Diffuse X-ray & Multi-wavelength Emission in Nearby, Face-on Spiral Galaxies; San Antonio, Texas Astrophysics Researchers Meeting. San Antonio, TX, Mar. 22, 2013.
- 1. "Diffuse X-ray & Multi-wavelength Emission in Nearby, Face-on Spiral Galaxies" and poster presentation "Diffuse X-ray Emission and Star Clusters in Nearby, Face-on Spiral;" UTSA College of Science, COS, Research Conference. San Antonio, TX, Oct. 5, 2012.

Poster Presentations

- 21. From Radio to X-ray: Tracing the flares of YZ Canis Minoris Across the Spectrum; American Geophysical Union, AGU24 Annual Meeting, Washington, DC, Dec. 2024.
- **20.** From Radio to X-ray: Tracing YZ CMi's Flares Across the Spectrum; Cool Stars 22, San Diego, California, Jun. 24-28, 2024.

- **19.** Is the Flaring Star Wolf 359 a Good Exoplanet Host?; 2023 UMD Postdoctoral Research Symposium, University of Maryland, College Park, MD, Sep. 2023.
- **18.** Is the Flaring Star Wolf 359 a Good Exoplanet Host?; Towards Other Earths III: The Planet-Star connection, Porto, Portugal, Jul. 17-21, 2023.
- **17.** Simultaneous Multiwavelength Swift, TESS, and NICER Observations of Highly Active M Dwarf Stars; 2022 UMD Postdoctoral Research Symposium, University of Maryland, College Park, MD, Sep. 2022.
- **16.** Simultaneous Multiwavelength Swift, TESS, and NICER Observations of Highly Active M Dwarf Stars; Cool Stars 21, Toulouse, France, Jul. 4-9, 2022.
- **15.** Simultaneous Multiwavelength Observations of the Highly Active M Dwarf YZ CMi; TESS Science Conference II, Virtual Meeting, Aug. 2021.
- **14.** Multiwavelength Observations of the RV Tau Variable U Monocerotis; American Astronomical Society, AAS 235th Meeting. Honolulu, HI, Jan. 2020.
- **13.** X-ray & Submillimeter Observations of the Pulsating RV Tau Variable U Mon; 2019 Spring Symposium The Deaths and Afterlives of Stars; Space Telescope Science Institute; Apr. 2019.
- **12.** Submillimeter Array Observations of the Large Disk Around RV Tau Star U Mon; 7th National Capital Area Disks Meeting; Johns Hopkins University / Space Telescope Science Institute; 26 Sep., 2018.
- **11.** Observations of Disks Around RV Tau Variables with the Submillimeter Array; Cool Stars Conference; Boston University, Boston, MA, Jul. 2018.
- 10. Evidence for Disk Obscuration in Kepler Observations of the Pulsating RV Tau Variable DF Cyg; Kepler-K2 Science Conference; NASA Ames, Mountain View, CA, Jun. 2017.
- **9.** Evidence for Binarity in Kepler Observations of the Pulsating RV Tau Variable DF Cygni; American Astronomical Society, AAS 229th Meeting. Grapevine, TX, Jan. 2017.
- **8.** Stellar Evolution at the Crossroads: A Closer Look at the RV Tauri Variable Star DF Cygni; 4th Annual DC/MD/VA Astrophysics Meeting, The George Washington University, Washington DC, Jun. 2016.
- **7.** Stellar Evolution at the Crossroads: A Closer Look at the RV Tauri Variable Star DF Cygni; Fisk University Symposium, Nashville, TN, Aug. 2015.
- **6.** Stellar Evolution at the Crossroads: A Closer Look at the RV Tauri Variable Star DF Cygni; Fisk-Vanderbilt Masters-to-PhD Bridge Program, Research Celebration Day. Nashville, TN, Aug. 2015.
- **5.** Diffuse Hot Gas in M51; Chandra's X-ray View of Galaxy Ecosystems; Boston, MA. Jul. 2014.

- **4.** Diffuse Emission in Nearby, Face-on Spiral Galaxies; AAS 223rd Meeting; Washington, DC, Jan. 5-9, 2014.
- **3.** Diffuse X-ray Emission and Star Clusters in Nearby, Face-on Spiral Galaxies; AAS 219th Meeting. Austin, TX, Jan. 7-12 2012.
- 2. X-ray Eclipses in the 2010 Outburst of the Recurrent Nova U Sco? & Observations of the 2010 January Outburst of the Recurrent Nova U Sco using NASA's Swift; AAS 117th Meeting; Seattle, WA, Jan. 9-13 2011.
- "X-ray Eclipses in the 2010 Outburst of the Recurrent Nova U Sco?" & "Observations of the 2010 January Outburst of the Recurrent Nova U Scoprius using NASA's Swift"; Joint Fall 2010 Meeting of the Texas Sections of the APS, AAPT, Zone 13 of SPS and the National Society of Hispanic Physicists, San Antonio, TX, Oct. 21-23, 2010.

Interviews

- NASA Space Apps Challenge Hermosillo Noticias Telemax Sonora, MX Oct. 2023
- Scientist of the Month NASA-Goddard CRESST II Feb. 2023
- First a Bridge Program Graduate, Now a NASA Astrophysicist APS News Jan. 2023
- Early Career Spotlight NASA Sciences and Exploration Directorate Oct. 2022
- Ver Oportunidades En El Fracaso Y Persistir Animal MX Journal Sep. 2022
- Alumni Spotlight UTSA College of Sciences Dec. 2020

Professional Memberships/Affiliations

American Geophysical Union (AGU)	2024 - Present
National Society of Black Physicists (NSBP)	2023 - Present
Latinx Employee Association (LEA) at UMD	2021 - Present
Vanderbilt Association of Hispanic and Latinx Alumni	2021 - Present
Sigma Xi The Scientific Research Society ($\Sigma\Xi$)	2015 - Present
National Society of Hispanic Physicists (NSHP)	2013 - Present
Toastmasters International	2013 - Present
Society for Advancement of Chicanos & Native Americans in Science (SACNAS)	2013 - Present
American Physical Society (APS)	2011 - Present
American Astronomical Society (AAS)	2011 - Present
Sigma Pi Sigma The Physics Honor Society ($\Sigma\Pi\Sigma$)	2011 - Present
LeaderShape Institute Alumna & Pebble Club	2011 - Present
UTSA Alumni Association	2013 - 2014
San Antonio Astronomical Association	2013 - 2014
UTSA San Antonio Texas Astrophysics Researchers (STAR)	2011 - 2014
Society of Physics Students (SPS)	2010 - 2013
National Society of Collegiate Scholars (NSCS)	2008 - 2013