# YASWANT DEVARAKONDA

#### **EDUCATION**

**Texas A&M University** 

PhD in Astronomy
May 2023
M.S. in Astronomy
December 2021
Applied Statistics Certificate
December 2021

Associate Certificate from the Center for the Integration of Research, Teaching, and Learning

July 2019

The University of Texas at Austin

B.S. in Astronomy
B.S. in Physics
May 2018
May 2018

#### **POLICY EXPERIENCE**

#### John N. Bahcall Public Policy Fellow

April 2023 - Current

American Astronomical Society

- Led discussions with Congressional members and staff on legislation affecting astronomy
- Communicated the issues and needs of the US astronomy community with federal agencies such as NASA, NSF, Department of Energy, Department of State, and the Office of Science and Technology Policy
- Coordinated with industry, scientific organizations, and governmental agencies at the national and international level on interests relating to space commerce, science, and security
- Published monthly blog posts to update society members on policy related issues

# **Congressional Visits Day**

American Astronomical Society

- Organized and led discussions with members of Congress and the Office of Science and Technology Policy on astronomy related issues
   17-19 April 2023
- Participated in discussions with the Office of Science and Technology Policy on astronomy related issues

20 July 2022

• Participated in discussions with members of Congress on astronomy related issues

2-4 May 2022

RESEARCH EXPERIENCE

August 2020 - March 2023

# Graduate Research Assistant, Texas A&M University Advisors: Dr. Peter Brown & Dr. Nicholas Suntzeff

Advisors. Dr. Peter Brown & Dr. Nicholas Suntzen

- Developed a template fitting routine to estimate UV/optical dust extinction and K-corrections for SNe Ia
- Compared the UV and optical properties of SNe Ia light curves to provide statistical constraints on diversity and correlation across wavelength regimes
- Contributed to the first UV/optical Hubble diagram that uses Type Ia SNe in the Hubble flow using Swift UVOT and HST observations

# Graduate Research Assistant, Texas A&M University

August 2018 - July 2020

Advisor: Dr. Jonelle Walsh

- Analyzed connections between SMBHs and their host galaxies for the MASSIVE survey
- · Estimated contributions to the total mass of galaxies based on their stellar and dark matter components
- Created kinematic maps of galaxies based on IFU spectroscopy of their stellar populations

# Undergraduate Research Assistant, University of Texas at Austin

August 2015 - July 2018

Advisor: Dr. Steve Finkelstein

- Examined gravitationally lensed Lyman-Alpha emmitting galaxies to fill out the faint end of the LAE luminosity function
- Led a team of 5 students in calibrating IFU spectrographs as part of the HETDEX survey
- Measured the point-spread function of DECam data as part of the HETDEX survey

# SELECTED SCIENCE EDUCATION AND COMMUNICATION EXPERIENCE

# Instructor of Record

• ASTR 102: Observational Astronomy, Texas A&M University

August 2019-May 2021

### **Teaching Assistant**

• ASTR 111: Overview of Modern Astronomy (Lab), Texas A&M University

AST 321: The Future of Humanity, University of Texas at Austin

AST 309: The Lives and Deaths of Stars, University of Texas at Austin

• AST 301: Introduction to Astronomy, University of Texas at Austin

August 2018 - May 2019

January 2018 - May 2018

August 2017 - December 2017

August 2016 - May 2017

Astronomy on Tap BCS August 2018 - May 2023

- What's Up Segment Host
- Show Host (recurring)
- Presenter (recurring)

#### Texas A&M Physics and Engineering Festival (Physics Fest)

April 2019 - April 2023

- Astronomy Demonstrations Co-Lead
- Organized teams of undergraduate and graduate students to present demonstrations at a festival attended by 5,000 K-12 students

#### **Painter Hall Observatory**

January 2017 - July 2018

• Telescope Operator and Star Party Host

# SELECTED SERVICE, ADVOCACY, AND LEADERSHIP

# AggieNova Undergraduate Research Group

June 2022 - May 2023

Mentored a team of 4 undergraduate students in individual research projects

# Mentoring and Advising Graduates in an Inclusive Community (MAGIC)

August 2019 - May 2023

· Mentored first-year PhD students with regular meetings and professional development workshops

# Texas A&M University Graduate and Professional Student Government (GPSG)

• Advocacy Committee Co-Chair for Legislative Affairs

June 2022 - May 2023 June 2020 - May 2023

- Senator
- Wrote and Introduced GPSG Bill 55.07: On the Accessibility of Menstrual Health Products on Campus
   Participated in discussions to institute a university-wide minimum stipend for graduate student workers
- Organized a coalition of student groups to collectively advocate for the needs of marginalized communities to university administration
- Created a new program to help incoming international students acclimate

# **Graduates Learning Astronomy Skills Seminar (GLASS)**

August 2020 - July 2022

• Co-Chair, led professional development workshops for graduate students and postdocs

#### Society for the Underrepresented in Physics and Astronomy (SUPA)

August 2020 - July 2022

• Co-Chaired organization focused on highlighting IDEA issues within the department and providing community support for marginalized people

# Discover, Explore, and Enjoy Phyics and Engineering (DEEP)

August 2020 - May 2022

Mentored a total of 7 undergraduates in creating educational demonstrations for K-12 students

# **SELECTED TALKS & PRESENTATIONS**

#### IUA Symposium 385: Astronomy and Satellite Constellations: Pathways Forward, La Palma, Spain

Session Chair: International Law and National Policy

5 October 2023 4 October 2023

• Contributed Talk: US Regulatory Updates

# 242nd Meeting of the American Astronomical Society, Albuquerque, New Mexico

• Dissertation Talk: Determining the Intrinsic UV Colors of Type Ia Supernovae with SED Modeling

6 June 2023

# Science Seminar Series, University of Wisconsin-Madison

• Invited Talk: Unlocking the Ultraviolet Properties of Type Ia Supernovae

17 October 2022

# Cook's Branch Supernova Symposium, Montgomery, TX

• Invited Talk: Determining the Intrinsic UV Colors of Type Ia Supernovae with SED Modeling

15 March 2023 15 March 2022

• Invited Talk: Early Light Curves of Type Ia SNe in the UV and Optical

ComSciCon Houston, Rice University

• Talk: Type Ia SNe in the Ultraviolet

5 March 2022

#### **PUBLICATIONS**

#### **First Author**

Comparisons of Type Ia Supernova Light Curves in the UV and Optical with the Swift Ultra-violet/Optical Telescope Y. Devarakonda & P. J. Brown, The Astronomical Journal, Volume 163, Issue 6, id.258, 10 pp. (2022) ADS

# **Co-Author**

A Swift Response to Newly Discovered, Nearby Transients
P. J. Brown, M. Robertson, Y. Devarakonda, E. Sarria, D. Pooley, and M. Stritzinger Universe, Vol. 9, Issue 5, p. 218 (2023) ADS

The Spitzer-HETDEX Exploratory Large Area Survey. II. The Dark Energy Camera and Spitzer/IRAC Multiwavelength Catalog I. G. B. Wold, L. Kawinwanichakij, M. L. Stevens, S. L. Finkelstein, C. Papovich, Y. Devarakonda, and 12 additional authors The Astrophysical Journal Supplement Series, Volume 240, Issue 1, article id. 5, 21 pp. (2019) ADS

#### **Contributing Author**

The Hobby-Eberly Telescope Dark Energy Experiment (HETDEX) Survey Design, Reductions, and Detections K. Gebhardt, E. Mentuch Cooper, R. Ciardullo, V, and 60 additional authors including **Y. Devarakonda** The Astrophysical Journal, Volume 923, Issue 2, id.217, 39 pp. (2021) ADS

#### **Doctoral Dissertation**

Unveiling the Ultraviolet Properties of Type Ia Supernovae Y. Devarakonda, Texas A&M University. OAKTrust

#### **AAS Policy Blog**

Impact of a Shutdown on Astronomy Link	19 September 2023
The Satellite and Telecommunications Streamlining Act: A Postmortem Analysis Link	22 August 2023
Understanding the FY24 Appropriations Bills Link	20 July 2023
A Letter to the Congressional Appropriations Leadership Link	13 June 2023
An In-Depth Look at the FY 2024 NASA Budget Request Link	7 May 2023
Introducing the New John N. Bahcall Public Policy Fellow Link	25 April 2023
Making the Case for the Future of Astronomy Link	8 August 2022