

# ANTONIO C. RODRIGUEZ

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EDUCATION	PH.D. IN ASTROPHYSICS, CALIFORNIA INSTITUTE OF TECHNOLOGY Advisor: Shrinivas R. Kulkarni	2025 ( <i>expected</i> )
	M.S. IN ASTROPHYSICS, CALIFORNIA INSTITUTE OF TECHNOLOGY Advisor: Shrinivas R. Kulkarni	2023
	B.S. IN PHYSICS, STANFORD UNIVERSITY Honors Thesis: <i>Youthful Exuberance of FU Ori Accretion Disks</i> Advisors: Lynne A. Hillenbrand and Roger W. Romani	2020
AWARDS	NATIONAL SCIENCE FOUNDATION GRADUATE RESEARCH FELLOWSHIP FORD FOUNDATION PREDOCTORAL FELLOWSHIP NEUGEBAUER SCHOLAR, France A. Córdova Research Fund ANTHONY FELLOWSHIP, California Institute of Technology FORD FOUNDATION PREDOCTORAL FELLOWSHIP (HONORABLE MENTION) JEFFREY ALAN WILLOCK MEMORIAL AWARD, Stanford University Outstanding member of the senior class concentrating in astrophysics.	2022 2022 2022 2020 2020 2020
AWARDED TELESCOPE TIME	PALOMAR OBSERVATORY, 5 METER HALE TELESCOPE <i>Magnetic Cataclysmic Variables: Characterization of X-ray Sources with ZTF Counterparts.</i> Additional 20+ nights as Co-I. Instruments Used: DBSP, CHIMERA, WASP.  CHANDRA X-RAY OBSERVATORY <i>Flux Limits on The Nearest Black Hole: Gaia BH1.</i> Additional 20ks nights as Co-I. Instruments Used: ACIS.  KECK OBSERVATORY, 10 METER KECK I AND II TELESCOPES <i>ZTF Galactic Science Follow-ups.</i> Instruments Used: LRIS, ESI.  LICK OBSERVATORY, 3 METER SHANE TELESCOPE <i>ZTF Galactic Science Follow-ups.</i> Instrument used: Kast.	15 nights (PI)      20 ks (PI)   20+ nights (Co-I)  10+ nights (Co-I)
FIRST AUTHOR PUBLICATIONS	[1] Antonio C. Rodriguez et al. "SRGeJ045359.9+622444: A 55 Minute Period Eclipsing AM Canum Venaticorum Star Discovered from a Joint SRG/eROSITA + ZTF Search". In: 954.1, 63 (Sept. 2023), p. 63. DOI: <a href="https://doi.org/10.3847/1538-4357/ace698">10.3847/1538-4357/ace698</a> . arXiv: <a href="https://arxiv.org/abs/2306.13133">2306.13133</a> [ <a href="#">astro-ph.HE</a> ]. [2] Antonio C. Rodriguez et al. "Discovery of Two Polars from a Crossmatch of ZTF and the SRG/eFEDS X-Ray Catalog". In: 945.2, 141 (Mar. 2023), p. 141. DOI: <a href="https://doi.org/10.3847/1538-4357/acbb6f">10.3847/1538-4357/acbb6f</a> . arXiv: <a href="https://arxiv.org/abs/2206.04714">2206.04714</a> [ <a href="#">astro-ph.HE</a> ]. [3] Antonio C. Rodriguez et al. "The Search for a Counterpart to NuSTAR J053449+2126.0". In: <i>Research Notes of the American Astronomical Society</i> 6.3, 50 (Mar. 2022), p. 50. DOI: <a href="https://doi.org/10.3847/2515-5172/ac5c51">10.3847/2515-5172/ac5c51</a> . arXiv: <a href="https://arxiv.org/abs/2203.08613">2203.08613</a> [ <a href="#">astro-ph.HE</a> ].	

- [4] Antonio C. Rodriguez et al. “Microlensing Events in the Galactic Plane Using the Zwicky Transient Facility”. In: 927.2, 150 (Mar. 2022), p. 150. DOI: [10.3847/1538-4357/ac51cc](https://doi.org/10.3847/1538-4357/ac51cc). arXiv: [2112.07684](https://arxiv.org/abs/2112.07684) [[astro-ph.SR](#)].
- [5] Antonio C. Rodriguez and Lynne A. Hillenbrand. “Application of a Steady-state Accretion Disk Model to Spectrophotometry and High-resolution Spectra of Two Recent FU Ori Outbursts”. In: 927.2, 144 (Mar. 2022), p. 144. DOI: [10.3847/1538-4357/ac496b](https://doi.org/10.3847/1538-4357/ac496b). arXiv: [2112.01549](https://arxiv.org/abs/2112.01549) [[astro-ph.SR](#)].

PRESENTATIONS	ZTF Team Meeting	2023
AND TALKS	Caltech. Pasadena, CA.	
	The Golden Age of Cataclysmic Variables VI.	2023
	La Torre Hotel. Mondello, Palermo, Italy.	
	AM CVn5: 5th International Workshop on AM CVn Binaries	2023
	Armagh Observatory & Planetarium. Armagh, Northern Ireland	
	Chandra 24th Annual Workshop	2023
	MIT. Cambridge, Massachusetts.	
	Caltech Tea Talk	2023
	Caltech. Pasadena, CA.	
	KITP Workshop Talk: White Dwarfs as Probes of the Evolution of Planets, Stars, the Milky Way and the Expanding Universe	2022
	University of California, Santa Barbara. Santa Barbara, CA	
	Chandra Lunch Seminar	2022
	MIT. Cambridge, Massachusetts.	
	Theoretical Astrophysics Lunch Seminar	2022
	Cornell University. Ithaca, NY.	
	COSMOS Lunch Talk (fully in Spanish)	2022
	Universidad de Guanajuato. Guanajuato, Mexico.	
	ZTF Team Meeting	2022
	Northwestern University. Evanston, IL	
	25th International Microlensing Meeting	2023
	Observatoire de Paris. Paris, France.	
	FLASH Lunch Talk	2022
	University of California, Santa Cruz. Santa Cruz, CA	
	American Astronomical Society Meeting	2022
	Pasadena, CA.	
	High Energy Astrophysics Colloquium	2022
	Max Planck Institute for Astrophysics (MPA). Garching, Germany	
	Astrophysics Lunch Seminar	2022
	Radboud University. Nijmegen, Netherlands	
	ZTF Stellar Group Conference	2022
	University of Warwick. Coventry, UK	
	ZTF Team Meeting	2022
	IN2P3. Paris, France	
	American Astronomical Society Meeting	2020
	Honolulu, Hawaii	
TEACHING AND TUTORING	PHYSICS AND ASTROPHYSICS TEACHING ASSISTANT	2021-2022
	Caltech Division of Physics, Mathematics, and Astronomy.	
	Physics 1A: Introductory Physics (Fall 2021).	
	Astronomy 102: Physics of the Interstellar Medium (Winter 2022).	
	Astronomy 3: Discovering the Universe (Spring 2023).	

	STANFORD CENTER FOR TEACHING AND LEARNING MATH AND PHYSICS TUTOR	2018-2020
	LEAD MATH AND PHYSICS TUTOR	2019-2020
	Stanford Office of the Vice Provost for Teaching and Learning	
OUTREACH	CALTECH ASTRONOMY OUTREACH	2020-
	Speaker at public talks including stargazing nights and <i>Astronomy on Tap</i> . Host for <i>Astronomía en el Bar</i> events held completely in Spanish.	
	STANFORD ASTRONOMICAL SOCIETY, CO-PRESIDENT	2017-2020
	MEMBER	2016-2020
	Participated in and led quarterly stargazing and informational sessions for the public. Led regular outreach events and directed expansion of events to underserved Bay Area elementary and middle schools. Helped manage a \$10,000+ budget for telescopes, astrophotography, outreach activities, external collaborations, emergency fund, etc.	
PROFESSIONAL	American Astronomical Society, Graduate Member	2020-
MEMBERSHIP	American Astronomical Society, Undergraduate Member	2019-2020
	Stanford Physics Department Committee on Undergraduate Studies	2019-2020
TECHNICAL	Python (Numpy, Scipy, Jupyter Notebook), Mathematica, Java, C++, R, L <sup>A</sup> T <sub>E</sub> X, Git, Unix/Linux, IRAF/PyRAF, SExtractor, TOPCAT, SAO DS9.	
SKILLS	Languages: English (Native), Spanish (Native), French (Conversational).	