Rodrigo E. L. Córdova Rosado

Department of Astrophysical Sciences, Princeton University, 4 Ivy Lane, Princeton, NJ, 08540 rodrigoc@princeton.edu

EDUCATION	Princeton University, Princeton, New Jersey, USA	
	PhD in Astrophysical Sciences Anticipated Graduation Date: May 2025	2020 – Present
	University of Cambridge, Cambridge, Cambridgeshire, UK	
	MPhil in Archaeology of the Americas Dissertation: "New Approaches to the Archaeoastronomy of Chaco Cany	2019 – 2020 yon"
	Harvard University, Cambridge, Massachusetts, USA	
	Cum Laude Joint A.B. in Astrophysics-Physics Secondary in Archaeology	2015 – 2019
PROFESSIONAL	Graduate Assistant in Instruction	
	Department of Astrophysical Sciences, Princeton University	2021 – Present
	Resident Graduate Student	
	Forbes College, Princeton University	2021 – Present
	Graduate Teaching Fellow	2020 Draggart
	Princeton University Preparatory Program (PUPP) Gates Cambridge Scholar	2020 – Present
	University of Cambridge	2019 – 2020
	SAO Intern	2010 2020
	Smithsonian Astrophysical Observatory, Harvard University	2017 - 2018
	Clay Telescope Observer - Group Leader	
	Center for Astrophysics Harvard & Smithsonian	2016 – 2019
	Affiliated Student - Banneker Institute	2016 2016
	Center for Astrophysics Harvard & Smithsonian Tutor - Bureau of Study Counsel	2016 – 2016
	Harvard University	2016 – 2019
HONORS &	Ford Foundation Pre-Doctoral Fellowship, National Academies of Sciences, Engi	neering & Medicine 2022
AWARDS	Princeton Graduate Scholars Program (GSP)	2020
	President's Fellowship - Princeton University Graduate School	2020
	2020 Breakthrough Prize in Fundamental Physics Co-Recipient (EHT)	2019
	Gates Cambridge Scholarship	2019
	Caltech Summer Undergraduate Research Fellowship	2018
	Harvard College Research Program Summer Research Fellowship	2017 & 2016
	Eagle Scout	2012
SELECTED	Department of Astrophysical Sciences , Princeton University	
RESEARCH	Semester Project	Jan 2021- Present
EXPERIENCE	Project: <i>Clustering Analysis of Obscured and Unobscured AGN in HSC</i> Supervisors: Dr. Jenny Greene, Dr. Andrew Goulding	
	Semester Project	Aug 2020- Present
	Project: Power Spectrum Analysis of Interstellar Dust in ACT Data Supervisors: Dr. Susan Clark, and Dr. Brandon Hensley Paper in prep.	
	Center for Astrophysics Harvard & Smithsonian, Harvard University	
	Astrophysics Senior Thesis Project	2018 – 2019
	Project: Cosmic Dawn Tomography: Ly α Power Spectrum Analysis Supervisors: Dr. Lincoln Greenhill, and Dr. Hugh Garsden	2010 2013

Astrophysics Laboratory Research Project

Mar 2018- May 2018

Project: Observations of the CMB with 11GHz and 30GHz Radiometers

Supervisors: Dr. John Kovac

Research Project May 2017- Jun 2018

Project: Joint meteorological statistics of observing sites for the Event Horizon Telescope

Supervisors: Dr. Sheperd Doeleman, Dr. Michael Johnson, and Dr. Scott Paine

Junior Research Tutorial Project

Aug 2017- Dec 2017

Project: Mapping Galaxy Clusters with Luminous Red Galaxy Measurements

Supervisors: Dr. Daniel Eisenstein

Jet Propulsion Laboratory (JPL), California Institute of Technology

Caltech SURF Research Project

Jun 2018- Aug 2018

Project: Measuring Galaxy Redshifts for the Dark Energy Survey: Redshift Color Maps

and Tomographic Analysis of Cosmic Shear

Supervisors: Dr. Daniel Masters and Dr. Jason Rhodes

SELECTED PUBLICATIONS

PAPERS

Córdova Rosado, R.; Hensley, B.; Clark, S.; Duivenvoorden, A.; et al. "The Atacama Cosmology Telescope: Small Scale Structure of Galactic Dust Emission and Magnetic Fields", *In preparation*

Raymond, A.; Palumbo, D.; Paine, S.; Blackburn, L. **Córdova Rosado, R.**; Doeleman, S; et al., "Evaluation of New Submillimeter VLBI Sites for the Event Horizon Telescope," *The Astrophysical Journal*, *Supplemental Series* Feb 2021. Accessible at https://iopscience.iop.org/article/10.3847/1538-3881/abc3c3

Event Horizon Telescope Collaboration **et al.**, "First M87 Event Horizon Telescope Results. I. The Shadow of the Supermassive Black Hole," *The Astrophysical Journal Letters* Apr 2019. Accessible at https://iopscience.iop.org/article/10.3847/2041-8213/ab0ec7/meta

Event Horizon Telescope Collaboration **et al.**, "First M87 Event Horizon Telescope Results. II. Array and Instrumentation," *The Astrophysical Journal Letters* Apr 2019. Accessible at https://iopscience.iop.org/article/10.3847/2041-8213/ab0c96

CONFERENCE POSTERS

Córdova Rosado, R.; Masters, D.; Rhodes, J.; "Constraints on the Dark Energy Survey's Photometric Galaxy Redshifts," at the *233rd American Astronomical Society Meeting*, Seattle, Washington, USA, Jan 2019. Online Poster: https://goo.gl/1ZosGD

Córdova Rosado, R.; et al., "Joint Meteorological Statistics of Observing Sites for the Event Horizon Telescope," at the *231st American Astronomical Society Meeting*, Washington, D.C., USA, Jan 2018. Press Discussion: https://goo.gl/awSb7S

DATA RELEASES

Bieryla, A.; Carmichael, T; Challis, P.; **Cordova, R.**; Finkbeiner, D.; Gilchrist, R.; Komorowski, E.; Alonso-Monsalve, E. "spectral ID of supernova AT2017cfb" 2017. http://www.astronomerstelegram. org/?read=10178

Cordova, R.; Cummins, K. "Transit Observation of HAT-P-37-b" 2016. http://var2.astro.cz/tresca/transit-detail.php?id=1461173881

SERVICE APPOINTMENTS

Public Observing Program, Princeton Department of Astrophysical Sciences

Co - Director

2022 – Present

Climate Committee, Princeton Department of Astrophysical Sciences

Graduate Student Representative

2021 – Present

Graduate Student Committee, Princeton Department of Astrophysical Sciences

Graduate Student Representative

2020 – Present

Advisory Group to the Diversity and Inclusion National Committee, Boy Scouts of America

Founding Member 2020 – Present

Camp Guajataka Summer Program, San Sebastián, Puerto Rico

Archaeology Instructor

2020

	Gates Scholars' Sustainability Working Group, University of Cambridge	
	External Action Group Leader	2019 - 2020
	Student Astronomers of Harvard-Radcliffe (STAHR), Harvard University	
	President	2018 - 2019
	Harvard College Astrophysical Society, Harvard University	
	Co-President	2017 - 2018
	Harvard Archery Team, Harvard University	
	President/ USA Archery Level 2 Instructor	2016 – 2018
PRESENTATION	NS SCIENCE TALKS	
	Dissertation Presentation Department of Archaeology, University of Cambridge	Mar 2020
	Senior Thesis Presentation	
	Center for Astrophysics Harvard & Smithsonian	Apr 2019
	JPL Astrophysics Summer Intern Colloquium Jet Propulsion Laboratory, California Institute of Technology	Aug 2018
	Astrophysics Laboratory Research Presentation Center for Astrophysics Harvard & Smithsonian	Apr 2018
	Junior Thesis Presentation Center for Astrophysics Harvard & Smithsonian	Dec 2017
	PUBLIC TALKS	
	Astronomía y la Arqueoastronomía STEAM Teaching at Arecibo Academy, Arecibo Observatory, Puerto Rico Mar 2021 &	2022, Oct 2022
	La Historia de Día de los Muertos Day of the Dead Event, Office of Access, Diversity & Inclusion, Princeton University	Nov 2021
	Astronomía como Carrera Científica Centro CRECE, San Juan, Puerto Rico	Nov 2021
	Student Observing Night and Presentation Forbes College, Princeton University	Sep 2021
	Cosmología Moderna STEAM Teaching at Arecibo (STAR) Academy, Arecibo Observatory, Puerto Rico	May 2021
	Archaeoastronomy of the American Southwest Internal Symposium, Sidney Sussex College, Cambridge, UK	Feb 2020
	The Archaeoastronomy of Chaco Canyon Internal Symposium, Gates Cambridge Scholars, University of Cambridge	Feb 2020
	La Primera Sombra de un Hoyo Negro Colegio San Ignacio de Loyola, San Juan, Puerto Rico	Sep 2019
	Public Observing Night with PBHA Mission Hill Afterschool Program Loomis-Michael Observatory, Harvard University	Mar 2019
	Eclipse Solar 2017 Colegio San Ignacio de Loyola, San Juan, Puerto Rico	Aug 2017
LANGUAGES	Spanish & English: Bilingual.	
	Ancient Greek: Intermediate (reading); basic (speaking, writing).	
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SKILLS Python, Linux/Unix, LATEX, MATLAB, Mathematica, C, Adobe Lightroom, Microsoft Office Suite