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Full Curriculum Vitae available [here](#).

PUBLICATIONS *5 First-author publications (1 in review), 17 Published or Submitted publications (16 Collaboration papers – 4 First author, 7 Significant contributions, 5 Editing contributions)*
A regularly updated list of Astronomy and Physics publications can be found [here](#).

PAPERS

Córdova Rosado, R., Goulding, A., Greene, J., et al. “Cross-correlation of Luminous Red Galaxies with ML-selected Active Galactic Nuclei in HSC-SSP. III. HOD Parameters for Type I and Type II Quasars”, *The Astrophysical Journal*, in press. Oct 2025. DOI: [10.48550/arXiv.2510.11780](https://doi.org/10.48550/arXiv.2510.11780)

Córdova Rosado, R., Goulding, A., Greene, J., et al. “Cross-correlation of Luminous Red Galaxies with ML-selected Active Galactic Nuclei in HSC-SSP. II. AGN classification and clustering with DESI spectroscopy”, *The Astrophysical Journal*. Dec 2025. DOI: [10.3847/1538-4357/ae182e](https://doi.org/10.3847/1538-4357/ae182e)

Gottemoller, W., Sahu, N., **Córdova Rosado, R.**, Iwamoto, L., Watson, C., Tran, K.V., et al. “Most strong lensing deflectors in the AGEL survey are in group and cluster environments”, *Submitted*. Oct 2025

Shajib, A., et al. “A supermassive black hole 7.1 gyr ago in the first Einstein Spiral gravitational lens”, *Expected submission by Nov. 1, 2025*.

Naess, S., et al. “The Atacama Cosmology Telescope: DR6 Maps”, *Submitted to JCAP*. Mar 2025. DOI: [10.48550/arXiv.2503.14451](https://doi.org/10.48550/arXiv.2503.14451)

Córdova Rosado, R., Goulding, A., Greene, J., et al. “Cross-correlation of Luminous Red Galaxies with ML-selected AGN in HSC-SSP: Unobscured AGN residing in more massive halos”, *The Astrophysical Journal*, Dec 2024. DOI: [10.3847/1538-4357/ad8342](https://doi.org/10.3847/1538-4357/ad8342)

Danieli, S., et al. “Merian: A Wide-Field Imaging Survey of Dwarf Galaxies at z 0.06-0.10”, *Submitted to The Astrophysical Journal*, Oct 2024 DOI: [10.48550/arXiv.2410.01884](https://doi.org/10.48550/arXiv.2410.01884)

Córdova Rosado, R., Santini, L. M., “The Solstitial Axis: Solar Alignments in Ancient Mesoamerica”, *Submitted to The Native American and Indigenous Studies Journal*.

Luo, Y., et al., “The Merian survey: design, construction, and characterization of a filter set optimized to find dwarf galaxies and measure their dark matter halo properties with weak lensing”, *Monthly Notices of the Royal Astronomical Society*, Mar 2024. DOI: [10.1093/mnras/stae925](https://doi.org/10.1093/mnras/stae925)

Coulton, W., et al., “Atacama Cosmology Telescope: High-resolution component-separated maps across one third of the sky”, *Physical Review Letters D*, Mar 2024. DOI: [10.1103/PhysRevD.109.063530](https://doi.org/10.1103/PhysRevD.109.063530)

Madhavacheril, M. S., et al., “The Atacama Cosmology Telescope: DR6 Gravitational Lensing Map and Cosmological Parameters”, *The Astrophysical Journal*, Feb 2024. DOI: [10.3847/1538-4357/acff5f](https://doi.org/10.3847/1538-4357/acff5f)

Qu, F. J., et al., “The Atacama Cosmology Telescope: A Measurement of the DR6 CMB Lensing Power Spectrum and Its Implications for Structure Growth”, *The Astrophysical Journal*, Feb 2024. DOI: [10.3847/1538-4357/acfe06](https://doi.org/10.3847/1538-4357/acfe06)

Córdova Rosado, R., Hensley, B., Clark, S., Duivenvoorden, A., et al. “The Atacama Cosmology Telescope: Galactic Dust Structure and the Cosmic PAH Background in Cross-correlation with WISE”, *The Astrophysical Journal*, Jan 2024. DOI: [10.3847/1538-4357/ad05cd](https://doi.org/10.3847/1538-4357/ad05cd)

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. DOI: [10.3847/1538-3881/abc3c3](https://doi.org/10.3847/1538-3881/abc3c3)

Kim, Jae-Young et al., “Event Horizon Telescope imaging of the archetypal blazar 3C 279 at an extreme 20 microarcsecond resolution ,” *The Astrophysical Journal Letters* Aug 2020. DOI: [10.1051/0004-6361/202037493](https://doi.org/10.1051/0004-6361/202037493)

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. DOI:[10.3847/2041-8213/ab0ec7](https://doi.org/10.3847/2041-8213/ab0ec7)

Event Horizon Telescope Collaboration **et al.**, “First M87 Event Horizon Telescope Results. II. Array and Instrumentation,” *The Astrophysical Journal Letters* Apr 2019. DOI:[10.3847/2041-8213/ab0c96](https://doi.org/10.3847/2041-8213/ab0c96)

CONFERENCE POSTERS

Córdova Rosado, R., Goulding, A., Greene, J., et al.; “Stronger Clustering in Unobscured AGN with an HSC × WISE Selection” at the *2024 Ford Fellows Conference*, Washington, D.C., USA, Jun 2024.

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>

Schumer, C., **et al.**, “Harvard Observing Project monitoring of Boyajian’s Star (KIC 8462852),” at the *229th American Astronomical Society Meeting*, Grapevine, TX, USA, Jan 2017.

Espinel, J., **et al.**, “Recent Observations of AG Pegasi’s Latest Outburst Phase by Harvard Observing Project,” at the *229th American Astronomical Society Grapevine, TX, USA, Jan 2017*.

DATA RELEASES

Bieryla, A.; Carmichael, T; Challis, P.; **Córdova, R.**; Finkbeiner, D.; Gilchrist, R.; Komorowski, E.; Alonso-Monsalve, E. “spectral ID of supernova AT2017cfb ” 2017.

<http://www.astronomerstelegram.org/?read=10178>

Córdova, R.; Cummins, K. “Transit Observation of HAT-P-37-b ” 2016.

<http://var2.astro.cz/tresca/transit-detail.php?id=1461173881>

PUBLIC-FACING WRITING

See translations and full text [here](#).

Córdova Rosado, R. “Huye Luna, Luna, Luna”, Jul 2023, [Article link](#).

Córdova Rosado, R. “Homo naledi, seres de la estrella creciente”, Jun 2023, [Article link](#).

Córdova Rosado, R. “Cuatro minutos: Starship y el inicio de una nueva era de exploración espacial”, *El Nuevo Día*, Apr 2023, [Article link](#).

Córdova Rosado, R. “Universos paralelos de dos telescopios boricuas”, *El Nuevo Día*, Oct 2022, [Article link](#).

Córdova Rosado, R. “El telescopio espacial James Webb y el futuro de la astronomía puertorriqueña”, *El Nuevo Día*, Jul 2022, [Article link](#).