


Rodrigo E. L. Córdoba Rosado

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

Full Curriculum Vitae available [here](#).

PUBLICATIONS 3 First-author publications (2 in review), 11 Published or Submitted publications
(10 Collaboration papers – 2 First author, 4 Significant contributions, 4 Editing contributions)
3 First-author publications in preparation

A regularly updated list of Astronomy and Physics publications can be found [here](#).

PAPERS

Córdoba Rosado, R., Goulding, A., Greene, J., et al. “Cross-correlation of Luminous Red Galaxies with ML-selected AGN in HSC-SSP: Unobserved AGN residing in more massive halos”, *Submitted to The Astrophysical Journal*, May 2024 DOI: [10.48550/arXiv.2409.08314](https://doi.org/10.48550/arXiv.2409.08314)

Córdoba Rosado, R., Santini, L. M., “The Solstitial Axis: Solar Alignments in Ancient Mesoamerica”, *Submitted to the Journal of Archaeological Science*.

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)

Córdoba 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. **Córdoba 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)

PAPERS IN PREPARATION

Córdoba Rosado, R., Goulding, A., Greene, J., et al. “Cross-correlation of Luminous Red Galaxies with ML-selected AGN in HSC-SSP and DESI: A Spectroscopic Analysis.”

Córdoba Rosado, R., Fuentes, A., “The Role of Celestial Ecology in Early Hominin Development.”

Córdoba Rosado, R., “Robust Statistical Analysis of Ancestral Archaeoastronomical Alignments at Chaco Canyon.”

CONFERENCE POSTERS

Córdova Rosado, R., Goulding, A., Greene, J., et al.; “Stronger Clustering in Unobscured AGN with an HSC \times 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.

Espinell, 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.; **Cordova, R.**; Finkbeiner, D.; Gilchrist, R.; Komorowski, E.; Alonso-Monsalve, E. “spectral ID of supernova AT2017cfc ” 2017.

<http://www.astronomersteleggram.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>

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](#).