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Select Publications:

1. **Wharton, R. S.**et al., "High Frequency FRB Search of Nearby Star Forming Galaxies M77 and M82", ApJ, <u>submitted</u>

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- 2. Bansal K., **Wharton**, **R. S.**, et al., "Simultaneous Radio and X-ray Observations of the Magnetar Swift J1818.0–1607", MNRAS, 523, 2401, 2023
- 3. Liu, K., Young, A., **Wharton, R. S.**, et al., "Detection of Pulses from the Vela Pulsar at Millimeter Wavelengths with Phased ALMA", *ApJL*, 885, L10, 2019
- 4. Wharton, R. S., et al., "VLA Observations of Single Pulses from the Galactic Center Magnetar", ApJ, 875, 143, 2019
- 5. Wharton, R. S., "Radio Interferometric Searches for Galactic Center Pulsars and Fast Radio Bursts", PhD Thesis, 2017
- 6. Chatterjee, S., Law, C. J., Wharton, R. S., et al., "Direct localization of a fast radio burst and its enigmatic counterpart", *Nature*, 541, 58, 2017
- 7. Wharton, R. S., et al., "Multiwavelength Constraints on Pulsar Populations in the Galactic Center", ApJ, 753, 108, 2012

Publications:

- 1. Torne, P., et al. (287 authors, including **Wharton, R. S.**), "A Search for Pulsars around Sgr A* in the First Event Horizon Telescope Data Set", ApJ, 959, 14, 2023
- 2. Bethapudi S., et al. (5 authors, including **Wharton**, **R. S.**), "High frequency study of FRB 20180916B using the 100-m Effelsberg radio telescope", MNRAS, 524, 3303, 2023
- 3. Abbate F., et al. (11 authors, including **Wharton, R. S.**), "Rotation measure variations in Galactic Centre pulsars", MNRAS, 524, 2966, 2023
- 4. Caleb M., et al. (30 authors, including **Wharton, R. S.**), "A subarcsec localized fast radio burst with a significant host galaxy dispersion measure contribution", *MNRAS*, 524, 2064, 2023
- 5. Main R. A., et al. (8 authors, including **Wharton, R. S.**), "Modelling Annual Scintillation Velocity Variations of FRB 20201124A", MNRAS, 522, L36, 2023
- Gautam T., et al. (9 authors, including Wharton, R. S.), "Upgraded GMRT survey for pulsars in globular clusters. I. Discovery of a millisecond binary pulsar in NGC 6652", A&A, 664, A54, 2022

- 7. Main R. A., et al. (8 authors, including **Wharton**, **R. S.**), "Scintillation time-scale measurement of the highly active FRB20201124A", MNRAS, 509, 3172, 2022
- 8. Marthi V. R., et al. (10 authors, including **Wharton**, **R. S.**), "Burst properties of the highly active FRB20201124A using uGMRT", MNRAS, 509, 2209, 2022
- 9. Eatough R. P., et al. (13 authors, including **Wharton, R. S.**), "Multi-epoch searches for relativistic binary pulsars and fast transients in the Galactic Centre", *MNRAS*, 507, 5053, 2021
- 10. Majid W. A., et al. (9 authors, including **Wharton**, **R. S.**), "A Bright Fast Radio Burst from FRB 20200120E with Sub-100 Nanosecond Structure", *ApJL*, 919, L6, 2021
- 11. Liu K., et al. (27 authors, including **Wharton**, **R. S.**), "An 86 GHz Search for Pulsars in the Galactic Center with the Atacama Large Millimeter / submillimeter Array", ApJ, 914, 30, 2021
- 12. Torne P., et al. (16 authors, including **Wharton**, **R. S.**), "Searching for pulsars in the Galactic centre at 3 and 2 mm", $A \mathcal{E} A$, 650, A95, 2021
- 13. Hilmarsson G. H., et al. (13 authors, including **Wharton**, **R. S.**), "Rotation Measure Evolution of the Repeating Fast Radio Burst Source FRB 121102", *ApJL*, 908, L10, 2021
- 14. Aggarwal K., et al. (12 authors, including **Wharton, R. S.**), "Your: Your Unified Reader", *JOSS*, 5, 2750, 2020
- 15. Marthi V. R., et al. (8 authors, including **Wharton, R. S.**), "Detection of 15 bursts from FRB 180916.J0158+65 with the upgraded Giant Metrewave Radio Telescope", *MNRAS*, 499, L16, 2020
- Madison, D. R., et al. (14 authors, including Wharton, R. S.), "A Deep Targeted Search for Fast Radio Bursts from the Sites of Low-redshift Short Gamma-Ray Bursts", ApJ, 887, 252, 2019
- 17. Event Horizon Telescope Collaboration (348 authors, including **Wharton**, **R. S.**), "First M87 Event Horizon Telescope Results. I. The Shadow of the Supermassive Black Hole" *ApJL*, 875, L1, 2019
- 18. Event Horizon Telescope Collaboration (341 authors, including **Wharton**, **R. S.**), "First M87 Event Horizon Telescope Results. II. Array and Instrumentation" *ApJL*, 875, L2, 2019
- Event Horizon Telescope Collaboration (217 authors, including Wharton, R. S.), "First M87 Event Horizon Telescope Results. III. Data Processing and Calibration" ApJL, 875, L3, 2019
- Event Horizon Telescope Collaboration (215 authors, including Wharton, R. S.), "First M87
 Event Horizon Telescope Results. IV. Imaging the Central Supermassive Black Hole" ApJL, 875, L4, 2019
- 21. Event Horizon Telescope Collaboration (221 authors, including Wharton, R. S.), "First M87 Event Horizon Telescope Results. V. Physical Origin of the Asymmetric Ring" ApJL, 875, L5, 2019

- 22. Event Horizon Telescope Collaboration (214 authors, including **Wharton**, **R. S.**), "First M87 Event Horizon Telescope Results. VI. The Shadow and Mass of the Central Black Hole" ApJL, 875, L6, 2019
- 23. Patel, C., et al. (29 authors, including Wharton, R. S.), "PALFA Single-pulse Pipeline: New Pulsars, Rotating Radio Transients, and a Candidate Fast Radio Burst", ApJ, 869, 181, 2018
- 24. Stovall, K., et al. (35 authors, including **Wharton**, **R. S.**), "PALFA Discovery of a Highly Relativistic Double Neutron Star Binary", *ApJL*, 854, L22, 2018
- 25. Michilli, D., et al. (34 authors, including **Wharton**, **R. S.**), "An extreme magneto-ionic environment associated with the fast radio burst source FRB 121102", *Nature*, 553, 182, 2018
- 26. Law, C., et al. (36 authors, including **Wharton, R. S.**), "A Multi-telescope Campaign on FRB 121102: Implications for the FRB Population", ApJ, 850, 76, 2017
- 27. Cordes, J. M., Wasserman, I., Hessels, J. W. T., Lazio, T. J. W., Chatterjee, S., **Wharton, R. S.**, "Lensing of Fast Radio Bursts by Plasma Structures in Host Galaxies", *ApJ*, 842, 35, 2017
- 28. Marcote, B., et al. (29 authors, including **Wharton**, **R. S.**), "The Repeating Fast Radio Burst FRB 121102 as Seen on Milliarcsecond Angular Scales", *ApJL*, 834, L8, 2017
- 29. Tendulkar, S. P., et al. (24 authors, including **Wharton, R. S.**), "The Host Galaxy and Redshift of the Repeating Fast Radio Burst FRB 121102", *ApJL*, 834, L7, 2017
- 30. Cordes, J. M., Wharton, R. S., Spitler, L. G., Chatterjee, S., Wasserman, I., "Radio Wave Propagation and the Provenance of Fast Radio Bursts", arXiv:1605.05890, 2016
- 31. Chiti, A., Chatterjee, S., **Wharton, R. S.**, Cordes, J. M., Lazio, T. J. W., Kaplan, D. L., Bower, G. C., Croft, S., "Transient Events in Archival Very Large Array Observations of the Galactic Center", *ApJ*, 833, 11, 2016
- 32. Scholz, P., et al. (24 authors, including **Wharton**, **R. S.**), "The repeating Fast Radio Burst FRB 121102: Multi-wavelength observations and additional bursts", ApJ, 833, 177, 2016
- 33. Spitler, L. G., et al. (32 authors, including **Wharton, R. S.**), "Fast Radio Burst Discovered in the Arecibo Pulsar ALFA Survey", *ApJ*, 790, 101, 2014