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Research Interests:

radio pulsar emission properties and physical mechanism, transient radio source survey, pulsar interstellar scintillation, radio frequency interference identification and mitigation, control system development for radio telescope

Selected Publications:

1. Wang, Z., **Wen Z. G.***, Yuan J. P., et al., Frequency-dependent emission of the millisecond pulsar B1937+21 with the Parkes ultrawideband receiver, 2025, The Astrophysical Journal, 987, 43
2. Wang H., **Wen Z. G.***, Wang N., et al., Waiting-time distribution of giant pulses from the Crab pulsar modeled with a non-stationary Poisson process, 2024, Acta Astronomica Sinica, 65, 2
3. Chen J. L., **Wen Z. G.***, Wang Z., et al., Investigation of periodic modulation behaviors from pulsar J2022+514, 2024, The Astrophysical Journal, 961, 114

4. Wang Z., **Wen Z. G.***, Yuan J. P., et al., Probing the interstellar medium from scintillation of the swooshing pulsar B0919+06, 2024, The Astrophysical Journal, 968, 109
5. Tan J., **Wen Z. G.***, Wang Z., et al., The bright single pulse emission from PSR B1133+16, 2024, Research in Astronomy and Astrophysics, 24, 045022
6. Chen J. L., **Wen Z. G.***, Wang H. G., et al., Periodic nulling and even-odd modulation properties of PSR J2313+4253, 2024, Scientia Sinica Physica, Mechanica & Astronomica, 54, 4
7. Wang H., **Wen Z. G.***, Duan X. F., et al., Exploring the individual-pulse behaviours of pulsar J1701-3726 with Parkes, 2023, The Astrophysical Journal, 950, 166
8. Zhang Y. F., **Wen Z. G.***, Wang N., et al., A Search for Fast Radio Bursts Associated with Gamma-ray Bursts with YNAO 40-m Radio Telescope, 2023, Serbian Astronomical Journal, 206, 39
9. Chen J. L., **Wen Z. G.***, Duan X. F., et al., Bright-mode Emission from PSR B0823+26 Using the Five-hundred-meter Aperture Spherical Radio Telescope, 2023, The Astrophysical Journal, 946, 2
10. Chen J. L., **Wen Z. G.***, Duan X. F., et al., Individual pulse emission from the diffuse drifter PSR J1401 - 6357 using the ultrawideband receiver on the Parkes radio telescope, 2023, Monthly Notices of the Royal Astronomical Society, 519, 2
11. Chen J. L., **Wen Z. G.***, Wang H. G., et al., Investigation of mode changing, pulse nulling and subpulse drifting properties in the asymmetric conal triple radio pulsar B2319+60, 2022, Research in Astronomy and Astrophysics, 22, 115014
12. Chen J. L., **Wen Z. G.***, Yuan J. P., et al., The discovery of a rotating radio transient J1918-0449 with intriguing emission properties with the five hundred meter aperture spherical radio telescope, 2022, The Astrophysical Journal, 934, 24
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14. **Wen Z. G.**, Yuan J. P.*, Wang N. et al., A single pulse study of the subpulse drifter PSR J1631+1252 discovered at FAST, 2022, The Astrophysical Journal, 929, 71
15. Chen J. L., **Wen Z. G.***, Yuan J. P., et al., Interstellar Scintillation of PSR J2048-1616, 2022, The Astrophysical Journal, 927, 14
16. Wang Z., **Wen Z. G.***, Yuan J. P., et al., Multifrequency Study of Periodic Nulling and Subpulse Drifting in Pulsar J2048-1616, 2021, The Astrophysical Journal, 923, 259
17. **Wen Z. G.***, Yuen R., Wang N., et al., Observations of Bright Pulses from Pulsar B0031-07 at 4.82 GHz, 2021, The Astrophysical Journal, 918, 57

18. Mijit M., **Wen Z. G.***, Wang N., The Detection and Investigations of Strong Pulses from PSR B1237+25, 2021, *Acta Astronomica Sinica*, 62, 1
19. **Wen Z. G.***, Yan W. M., Yuan J. P., et al., The Mode Switching in Pulsar J1326-6700, 2020, *The Astrophysical Journal*, 904, 72
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21. Chen J. L., **Wen Z. G.***, Hao L. F., et al., Giant Micropulse Emission in the Vela Pulsar at the C Band, 2020, *The Astrophysical Journal*, 899, 118
22. **Wen Z. G.**, Wang N.*, Yuan J. P., et al., Investigation of nulling and subpulse drifting properties of PSR J1727-2739, 2016, *Astronomy & Astrophysics*, 592, 127
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25. Zhang Z., Yan W. M., Yuan J. P., ..., **Wen Z. G.**, et al., A search for radio pulsars in supernova remnants using FAST with one pulsar discovered, 2024, *Chinese Physics Letters*, 41, 029701
26. Yuan J. P., Wang N., Dang S. J., ..., **Wen Z. G.**, et al., Characterizing timing noise in normal pulsars with the Nanshan radio telescope, 2024, *Universe*, 10, 105
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28. Tedila H. M., Yuen R., Wang N., Li D., **Wen Z. G.**, et al., Investigation of profile shifting and subpulse movement in PSR J0344+0901 with FAST, 2024, *The Astrophysical Journal*, 965, 144
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31. Liu S. F., **Wen Z. G.**, Wang S. Q., et al., Single-pulse emissions of PSRs J1611-0114 and J1617+1123, 2024, *Research in Astronomy and Astrophysics*, 21, 115001
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34. Xiang B. B.*, Wang W., Ban Y., Lin S. M., **Wen Z. G.**, et al., Influence and correction of wavefront primary aberration for radio telescopes using aberration theory, 2023, Research in Astronomy and Astrophysics, 23, 025015
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36. Miao C. C., Blackmon V., Zhu W. W., ..., **Wen Z. G.**, et al., Reciprocating magnetic fields in the pulsar wind observed from the black widow pulsar J1720-0534, 2023, Research in Astronomy and Astrophysics, 23, 105005
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44. Rejep R., Wang N., Yan W. M., **Wen Z. G.**, Nulling and subpulse drifting in PSR J1727-2739, 2022, Monthly Notices of the Royal Astronomical Society, 509, 2507
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