

**Publications in Refereed Journals**  
**Pankaj Jain**

1. *Correlations between QPO frequencies and spectral parameters of GRS 1915+105 using AstroSat observations*, (R. Dhaka, R. Misra, J. S. Yadav and P. Jain), MNRAS, stad2075 (2023)
2. *A Toy Model for Low Energy Nuclear Fusion*, (K. Ramkumar, H. Kumar and P. Jain), Pramana 97:109 (2023)
3. *Dipole Anisotropy in Gravitational Wave Source Distribution*, (G. Kashyap, N. K. Singh, K. S. Phukon, S. Caudill, P. Jain), JCAP, 06 (2023)042
4. *A GEANT4 based simulation framework for the large area muon telescope of the GRAPES-3 experiment*, (F. Varsi et al., Grapes-3 Collaboration), JINST 18 (2023), P03046
5. *The comptonizing medium of the black hole X-ray binary MAXI J1535571 through type-C quasi-periodic oscillations*, (D. Rawat et al), MNRAS, 520 (2023) 1, 113
6. *Probing cosmology beyond  $\Lambda$ CDM using SKA*, (S. Ghosh et al), J.Astrophys.Astron. 44 (2023) 1, 22
7. *Validating the improved angular resolution of the GRAPES-3 air shower array by observing the Moon shadow in cosmic rays*, (D. Pattnaik et al., Grapes-3 collaboration), Phys.Rev.D 106 (2022) 2, 022009
8. *Photon-induced low-energy nuclear reactions*, (P. Jain et al), Pramana J. Phys. (2022) 96
9. *Low Energy Nuclear fusion with Two Photon Emission*, (P. Jain et al), JCMNS 35, 1 (2022)
10. *Time-resolved spectroscopy on the heartbeat state of GRS 1915+ 105 using AstroSat* (D. Rawat, R. Misra, P. Jain and J. S. Yadav) MNRAS 511 (2022) 2, 1841
11. *Superhorizon Perturbations: A Possible Explanation of the Hubble-Lemaître Tension and the Large-scale Anisotropy of the Universe* (P. Tiwari, R. Kothari and P. Jain ) Astrophys.J.Lett. 924 (2022) L36
12. *A mechanism to explain galaxy alignment over a range of scales* (P. Tiwari and P. Jain) MNRAS 513 (2022) 1, 604
13. *Explaining excess dipole in NVSS data using superhorizon perturbation* (K. Das, K. Sankharva and P. Jain) JCAP 07 (2021) 035
14. *Testing evolution of LFQPOs with mass accretion rate in GRS 1915+105 with Insight-HXMT* (H. Liu et al.) Astrophys.J. 909 (2021) 1, 63
15. *General Treatment of Reflection of Spherical Electromagnetic Waves from Spherical, Uneven Antarctic Surface and Its Implications for the Mystery Events Detected by ANITA* (P. Dasgupta and P. Jain) Astropart.Phys. 128 (2021) 102530
16. *Energy sensitivity of the GRAPES-3 EAS array for primary cosmic ray protons* (B. Hariharan et al.) Experimental Astronomy 50, 185198 (2020)

17. *The angular resolution of GRAPES-3 EAS array after improved timing and shower front curvature correction based on age and size* (V. B. Jhansi et al.) *Journal of Cosmology and Astroparticle Physics* 07 (2020) 024
18. *Alignment of radio galaxy axes using FIRST catalogue*, (M. Panwar, P. Prabhakar, P. K. Sandhu, Y. Wadadekar and P. Jain) *Mon.Not.Roy.Astron.Soc.* 499 (2020) 1, 1226-1232
19. *Torsion driven Inflationary Magnetogenesis* (R. Kothari, M. V. S. Saketh and P. Jain), *Phys.Rev.D* 102 (2020) 2, 024008
20. *Simulation of atmospheric pressure dependence on GRAPES-3 particle density* (M. Zuberi et al), *Exper. Astron* 49 (2020), 1-2, 61-71.
21. *Identification of QPO frequency of GRS 1915+105 as the relativistic dynamic frequency of a truncated accretion disk*, (R. Misra, D. Rawat, J. S. Yadav and P. Jain) *Astrophysical Journal* 889 (2020), 2, L36
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23. *The galaxy power spectrum from TGSS ADR1 and the effect of flux calibration systematics* (P. Tiwari, S. Ghosh and P. Jain), *Astrophysical Journal* 887, 175 (2019)
24. *Effect of orbital eccentricity on the dynamics of precessing compact binaries* (K. S. Phukon, A. Gupta, S. Bose and P. Jain), *Phys. Rev. D* 100, 124008 (2019)
25. *Cosmological Dark Matter in a Conformal Model* (P. Sanyal, A. C. Nayak, G. Kashyap and P. Jain) *Phys. Rev. D* 100, 115032 (2019)
26. *Weak Lensing Effect on CMB in the Presence of a Dipole Anisotropy*, (A. Agarwal, N. K. Singh, P. Jain and P. Tiwari), *Eur. Phys. J. C* 79 no.7, 582 (2019).
27. *Study of timing evolution from non-variable to structured large-amplitude variability transition in GRS 1915+105 using AstroSat* (D. Rawat et al) *Astrophys. J.* 870, 4 (2019).
28. *Evidence of isotropy on large distance scales from polarizations of radio sources* (P. Tiwari and P. Jain), *Astron.Astrophys.* 622 A113, (2019).
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35. *Probing statistical isotropy of cosmological radio sources using SKA*, (S. Ghosh, P. Jain, G. Kashyap, R. Kothari, S. Nadkarni-Ghosh and P. Tiwari), *J. Astrophys. Astron* 37, 25 (2016).
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37. *Cosmological power spectrum in a noncommutative spacetime*, (R. Kothari, P. K. Rath and P. Jain), *Phys. Rev. D* 94, 063531 (2016).
38. *The Dirac Form Factor Predicts the Pauli Form Factor in the Endpoint Model*, (S. Dagaonkar, P. Jain and J. Ralston), *EPJC* 76, 368 (2016).
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49. *Relating the cosmological constant and slow roll to conformal symmetry breaking* , (G. Kashyap and P. Jain), *Modern Physics Letters A* **29**, 36 (2014).
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