
PUBLICATIONS

1. *Scaling property in cold compact stars*, **R. Sharma**, S. Mukherjee and S. D. Maharaj, *Mod. Phys. Lett. A*, **15** (2000) 1341-1346.
2. *Her X-1: A quark-diquark star?*, **R. Sharma** and S. Mukherjee, *Mod. Phys. Lett. A*, **16** (2001) 1049-1059.
3. *General solution for a class of static charged spheres*, **R. Sharma**, S. Mukherjee and S. D. Maharaj, *Gen. Relativ. Grav.*, **33** (2001) 999-1009.
4. *A general relativistic model for SAX J 1808.4-3658*, **R. Sharma**, S. Mukherjee, M. Dey and J. Dey, *Mod. Phys. Lett. A*, **17** (2002) 827-838.
5. *Compact Stars: A core-envelope model*, **R. Sharma** and S. Mukherjee, *Mod. Phys. Lett. A*, **17** (2002) 2535-2544.
6. *Radiating spherical collapse with heat flow*, M. Govender, K. S. Govinder, S. D. Maharaj, **R. Sharma**, S. Mukherjee and T. K. Dey, *Int. J. Mod. Phys. D*, **12** (2003) 667-676.
7. *Maximum mass of a class of cold compact stars*, **R. Sharma**, S. Karmakar and S. Mukherjee, *Int. J. Mod. Phys. D*, **15** (2006) 405-418.
8. *A class of relativistic stars with a linear equation of state*, **R. Sharma** and S. D. Maharaj, *Mon. Not. R. Astron. Soc.*, **375** (2007) 1265-1268.
9. *On surface tension for compact stars*, **R. Sharma** and S. D. Maharaj, *J. Astrophys. Astron.*, **28** (2007) 133-138.
10. *The role of pressure anisotropy on the maximum mass of cold compact stars*, S. Karmakar, S. Mukherjee, **R. Sharma** and S. D. Maharaj, *Pramana-j. of phys.*, **68** (2007) 881-889.
11. *A class of solutions for anisotropic stars admitting conformal motion*, Farook Rahaman, Mubasher Jamil, **Ranjan Sharma** and Kausik Chakraborty, *Astrophys. Space Sci.*, **330** (2010) 249-256.
12. *Geometry, equation of state and the collapse of a star*, Ramesh Tikekar and **R. Sharma**, *Mathematics Today*, **26** (2011) 105-111.

13. *A class of interior solutions corresponding to a $(2 + 1)$ -dimensional asymptotically anti-de Sitter spacetime*, **Ranjan Sharma**, Farook Rahaman and Indrani Karar, *Phys. Lett. B*, **704** (2011) 1-4.
14. *Singularity-free dark energy star*, Farook Rahaman, Raju Maulick, Anil Kumar Yadav, Saibal Ray and **Ranjan Sharma**, *Gen. Relativ. Grav.*, **44** (2012) 107-124.
15. *Non-adiabatic radiative collapse of a relativistic star under different initial conditions*, **Ranjan Sharma** and Ramesh Tikekar, *Pramana-j. of phys.*, **79** (2012) 501-509.
16. *Space-time inhomogeneity, anisotropy and gravitational collapse*, **Ranjan Sharma** and Ramesh Tikekar, *Gen. Relativ. Grav.*, **44** (2012) 2503-2520.
17. *Strange stars in Krori-Barua space-time*, Farook Rahaman, **Ranjan Sharma**, Saibal Ray, Raju Maulick and Indrani Karar, *Eur. Phys. J. C*, (2012) **72**:2071.
18. *Finch-Skea star in $(2 + 1)$ dimensions*, Ayan Banerjee, Farook Rahaman, Kanti Jotania, **Ranjan Sharma** and Indrani Karar, *Gen. Relativ. Grav.*, **45** (2013) 717-726.
19. *A relativistic model for strange quark star*, Mehedi Kalam, Anisul Ain Usmani, Farook Rahaman, S. Momowar Hossein, Indrani Karar and **Ranjan Sharma**, *Int. J. Theor. Phys.*, (2013)**52**:3319-3328.
20. *Collapse of a relativistic self-gravitating star with radial heat flux: Impact of anisotropic stresses*, **Ranjan Sharma** and Shyam Das, *Journal of Gravity*, **2013**, (2013) Article ID 659605, 1-8.
21. *Relativistic stellar model admitting a quadratic equation of state*, **R. Sharma** and B. S. Ratanpal, *Int. J. Mod. Phys. D*, (2013) **22**:1350074 (1-15).
22. *Modified Finch and Skea stellar model compatible with observational data*, D. M. Pandya, V. O. Thomas and **R. Sharma**, *Astrophys. Space Sci.*, (2014) **356**:285-292.
23. *Exact solutions in $(2 + 1)$ -dimensional anti-de Sitter space-time admitting a linear or nonlinear equation of state*, Ayan Banerjee, Farook Rahaman, Kanti Jotania, **Ranjan Sharma** and Mosiur Rahaman, *Astrophys. Space Sci.*, (2015) **355**:353-359.
24. *A class of conformally flat solutions for systems undergoing radiative gravitational collapse*, **Ranjan Sharma**, Shyam Das and Ramesh Tikekar, *Gen. Relativ. Grav.*, (2015) **47**:25.
25. *Noncommutative geometry inspired 3-dimensional charged black hole solution*

in an anti-de-Sitter background spacetime, Farook Rahaman, Piyali Bhar, **Ranjan Sharma** and Rishi Kumar Tiwari, *Eur. Phys. J. C*, (2015) **75**:107.

26. *Gravitational collapse of a circularly symmetric star in an anti-de Sitter spacetime*, **Ranjan Sharma**, Shyam Das, Farook Rahaman and Gopal Chandra Shit, *Astrophys. Space Sci.*, (2015) **359**:40.

27. *Gravitational collapse in spatially isotropic coordinates*, Megandhren Govender, Robert Bogadi, **Ranjan Sharma** and Shyam Das, *Astrophys. Space Sci.*, (2016) **361**:33.

28. *Dissipative gravitational collapse of an an(isotropic) star*, Shyam Das, **Ranjan Sharma**, Bikash Chandra Paul and Rumi Deb, *Astrophys Space Sci.*, (2016) 361:99.

29. *A comparative study between EGB gravity and GTR by modelling compact stars*, Piyali Bhar, Megan Govender and **Ranjan Sharma**, *Eur. Physics J. C*, (2017) 77:109.

30. *Charged compact stellar model in Finch-Skea spacetime*, B. S. Ratanpal, D. M. Pandya, **R. Sharma** and S. Das, *Astrophys. Space Sci.*, (2017) 362:82.

31. *Anisotropic stars obeying Chaplygin Equation of State*, Piyali Bhar, Megan Govender and **Ranjan Sharma**, *Pramana-j. of physics*, (2018) 90:5.

32. *Anisotropic extension of Finch and Skea stellar model*, **Ranjan Sharma**, Shyam Das and S. Thirukkanesh, *Astrophys. Space Sci.*, (2017) 362: 232.

33. *A family of solutions to the Einstein-Maxwell system of equations describing relativistic charged fluid spheres*, K. Komathiraj and **R. Sharma**, *to appear in Pramana-j. of physics*, (2018); arXiv:1712.07999.

34. *Anisotropic generalization of well-known solutions modelling self-gravitating fluid systems: An algorithm*, S. Thirukkanesh, F. C. Ragel, **Ranjan Sharma** and Shyam Das, *Eur. Phys. J. C*, (2018) 78:31.

35. *Space-time geometry and non-adiabatic collapse of an inhomogeneous star*, **Ranjan Sharma**, Lambert Academic Publishing, Germany, pp. 36-43, 2011, ISBN No. 978-3-8443-9165-7; (Proceedings of the Conference on Astrophysics and Astroparticle Physics held at the University of North Bengal during 27-28 January 2011).

36. *Spacetime inhomogeneity and gravitational collapse*, **R. Sharma**, *Proceedings of the 7th International Conference on Gravitation and Cosmology (ICGC 2011)*, IOP Publishing, *Journal of Physics: Conference Series*, **484** (2014) 012023 (1-4).

Submitted papers

37. *Behaviour of the Vaidya-Tikekar superdense star in the linear regime*, **Ranjan Sharma**, Shyam Das, M. Govender and D. Pandya, *submitted to Eur. Phys. J. C*, (2017).