

CURRICULUM VITAE**ASIFA ASHRAF****Personal Details**

Father's name:	MUHAMMAD ASHRAF SABIR
Date of birth:	21 st April 1993
Domicile:	Punjab (Attock)
Nationality:	Pakistani
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Languages:	English, Urdu, Punjabi, Chinese
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Awards and Scholarships

- 1) *Full Scholarship from Chinese Scholarship Council (CSC) for PhD degree.*
- 2) *Gold Medal in MS degree in 2017.*

Academic Qualifications

PhD (Applied Mathematics)
Nanjing Normal University, China

Area of Research: Computational analysis of astrophysical compact objects in extended theories of gravity

M.S (Applied Mathematics)
 Capital University of Science and Technology

17th February 2017

CGPA: 3.97/4

Area of Research: Numerical Simulation of MHD mixed convective nano fluid flow over backward facing step with internal heat generation.

M.Sc. (Applied Mathematics)
 University of Punjab Lahore, Pakistan

15th June 2014

Area of Research: Fractional order differential equations

Chinese Language

- HSK-4
- HSK-5

Field of Expertise

- I can solve various problems related to Fluid Dynamics.
- I can solve Different Cosmological problems in different modified theories of gravity.
- I have Expertise in **LATEX, MATHEMATICA, FORTRAN** and **MATLAB**.
- I can develop program codes for different mathematical problems in **MATHEMATICA, FORTRAN** and **MATLAB**.

Teaching Experience

- ❖ Worked as a lecturer (Mathematics) in PMAS Arid Agriculture University Rawalpindi (2017-2018).

Conference/ Workshops Participated

- International Conference on Recent Advances in Applied Mathematics (December 17-18, 2015) COMSATS Lahore Campus Pakistan
- One Day Conference on Gravitation and Cosmology (November 26, 2016) Punjab University Pakistan

Publications and Working Papers

1. Pada Das, Ujjal Debnath, **Asifa Ashraf**, Madhur Khurana, An acceptable study of anisotropic dark energy stars in modified $f(R,G)$ gravity, *Physics of the Dark Universe* 43 (2024) 101398
2. **Asifa Ashraf**, Allah Ditta, Değer Sofuoğlu, Wen-Xiu Ma, Faisal Javed, Farruh Atamurotov and Asif Mahmood, Quasi-periodic oscillations and particle motion around charged black hole surrounded by a cloud of strings and quintessence field in Rastall gravity, *Phys. Scr.* 99 (2024) 065011
3. Yihu Feng, Tayyab Naseer, **Asifa Ashraf**, Değer Sofuoğlu, Iroda Abdullayeva, A Brief analysis of isotropic Karmarkar models in modified gravity theory, *Chinese Journal of Physics* 90 (2024) 372–386
4. Yihu Feng, **Asifa Ashraf**, Saadia Mumtaz, S.K. Maurya, G. Mustafa, Farruh Atamurotov, Orbital motion and epicyclic oscillations around Bardeen black hole surrounded by perfect fluid dark matter, *Journal of High Energy Astrophysics* 43 (2024) 158–170
5. **Asifa Ashraf**, Faisal Javed, Wen-Xiu Ma and G. Mustafa, Structural properties of compact stars in extended Teleparallel gravity, *International Journal of Geometric Methods in Modern Physics* Vol. 21, No. 9 (2024) 2450161
6. Emre Demir, Tayyab Naseer, **Asifa Ashraf**, Ertan Güdekli, Investigating physical existence of charged stellar models, *Chinese Journal of Physics* 91 (2024) 299–315
7. G. Dilara Açıan Yıldız, Allah Ditta, **Asifa Ashraf**, Ertan Güdekli, Yousef Mohammed Alanazi, Anvar Reyimberganov, Optical properties of Euler–Heisenberg black hole surrounded by perfect fluid dark matter, *Physics of the Dark Universe* 46 (2024) 101583
8. Yihu Feng, Tayyab Naseer, **Asifa Ashraf** and Değer Sofuoğlu, Analysis of some newly constructed compact models in $f(R, T)$ theory, *Phys. Scr.* 99 (2024) 085034
9. M.R. Shahzad, **Asifa Ashraf**, M. Awais Qarni, Emad E. Mahmoud, Wen-Xiu Ma, Finch–Skea quintessence models in non-conservative theory of gravity, *Physics of the Dark Universe* 46 (2024) 101646
10. **Asifa Ashraf**, M. R. Shahzad, and Wen-Xiu Ma, Possible dark energy stars in Rastall gravity, *International Journal of Geometric Methods in Modern Physics* Vol. 21, No. 12 (2024) 2450200
11. S. K. Maurya, **Asifa Ashraf**, Fadhila Al Khayari, G. Mustafa, M. K. Jasim, New charged anisotropic solution in $f(Q)$ -gravity and effect of non-metricity and electric charge parameters on constraining maximum mass of self-gravitating objects, *Eur. Phys. J. C* (2024) 84:986

12. **Asifa Ashraf**, Faisal Javed, Wen-Xiu Ma, Arfa Waseem, Effect of perfect fluid dark matter on Bardeen thin-shell wormholes, *Eur. Phys. J. Plus* (2024) 139:857
13. **Asifa Ashraf**, Abdelghani Errehymy, Allah Ditta, Zhiyue Zhang, Xia Tiecheng, M. Daoud Structural properties of anisotropic stars in modified teleparallel gravity: A brief study via an embedding approach, *Eur. Phys. J. C* (2023) 83:312
14. **Asifa Ashraf**, M. R. Shahzad, Zhiyue Zhang, Ertan G'udekli, and M. Farooq Jamal, Constraining study of Rastall parameter on charged anisotropic compact star model. *Physica Scripta*, 98: 035027, 2023.
15. **Asifa Ashraf**, Faisal Javed, Zhiyue Zhang, and Ghulam Fatima, Traversable wormholes solutions in $f(R, \varphi, \chi)$ gravity under conformal symmetry. *International Journal of Geometric Methods in Modern Physics*, 20:01, 2350014, 2023.
16. **Asifa Ashraf and Zhiyue Zhang**, Stable wormhole models in general relativity under conformal symmetry. *International Journal of Geometric Methods in Modern Physics*, 18: 3, 2150041, 2021.
17. **Asifa Ashraf** Allah Ditta Quanyong Zhu and Zhiyue Zhang, Embedded interior solutions of $V_{elaX} - 1$ model in $F(\tau, T)$ gravity. *International Journal of Geometric Methods in Modern Physics*, 18: 8, 2150119, 2021.
18. **Asifa Ashraf**, Zhiyue Zhang, Tareq Saeed, Hussan Zeb and Taj Munir, Convective Heat Transfer Analysis for Aluminum Oxide (Al₂O₃)- and Ferro (Fe₃O₄)-Based Nano-Fluid over a Curved Stretching Sheet. *Nanomaterials*, 12: 1152, 2022.
19. **Asifa Ashraf**, G. Mustafa, Mushtaq Ahmad, and Ibrar Hussain, Lorentz distributed wormholesolutions in $f(\tau)$ gravity with off-diagonal tetrad under conformal motions. *Modern Physics Letters A*, 35: 29, 2050240, 2020.
20. **Asifa Ashraf**, S. Mumtaz, F. Javed and Zhiyue Zhang, Embedded class wormhole solutions under dark matter distributions in $F(\tau, \tau G)$ gravity. *Fortschritte der Physik-Progress of Physics*.
21. **Asifa Ashraf**, S. Mumtaz, F. Javed, and Zhiyue Zhang, Viable embedded wormholes and energy conditions in $f(R, G)$ gravity, *arXiv:2304.06256* (2023).
22. Adnan Malik, **Asifa Ashraf**, Uzma Naqvi and **Zhiyue Zhang**, Anisotropic spheres via embedding approach in $f(R)$ gravity, *International Journal of Geometric Methods in Modern Physics* Vol. 19, No. 5 (2022) 2250073
23. Adnan Malik, **Asifa Ashraf**, Fatima Mofarreh, and M. shoiab, Embedding procedure and wormhole solutions in Rastall gravity utilizing the class I approach, *International Journal of Geometric Methods in Modern Physics* (2023) 2350145
24. Munsif Jan, **Asifa Ashraf**, Abdul Basit, Aylin Caliskan, and Ertan G'udekli, Traversable Wormhole in $f(Q)$ Gravity Using Conformal Symmetry, *Symmetry* **2023**, 15, 859
25. G. Mustafa, M. Farasat Shamir, **Asifa Ashraf** and Tie-Cheng Xia Noncommutative wormholes solutions with conformal motion in the background of $f(G, T)$ gravity,

26. G. Mustafa, M. Farasat Shamir, **Asifa Ashraf** Anisotropic fluid spheres admitting Karmarkar condition in $f(G, T)$ gravity, Chinese Journal of Physics 67 (2020) 576–589
27. Saira Waheed, Ghulam Mustafa, Muhammad Zubair and **Asifa Ashraf**, Physically Acceptable Embedded Class-I Compact Stars in Modified Gravity with Karmarkar Condition, *Symmetry* 2020, 12, 962; doi:10.3390/sym12060962.
28. Allah Ditta, **Asifa Ashraf**, **Zhiyue Zhang**, and G. Mustafa, Modeling of anisotropic spheres in extended teleparallel theory with matter coupling, Chinese Journal of Physics 69 (2021) 240–252
29. M. S. Hashmi, Zainab Shehzad, **Asifa Ashraf**, **Zhiyue Zhang**, Yu-Pei Lv, Abdul Ghaffar, Mustafa Inc, and Ayman A. Aly, A New Variant of B-Spline for the Solution of Modified Fractional Anomalous Subdiffusion Equation, Journal of Function Spaces Volume 2021, Article ID 8047727, 8 pages
30. Shafqat Hussain, Khalid Mehmood, Muhammad Sagheer, **Asifa Ashraf**, Mixed convective magnetonano fluid flow over a backward facing step and entropy generation using extended Darcy-Brinkman-Forchheimer model.: Journal of Thermal Analysis and Calorimetry 77(2017);680.

References

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