

Research Publications of

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Books

Mathematical Physics, Proc. 14th Regional Conference, Eds. M. J. Aslam and K. Saifullah, World Scientific Publishing Company, Singapore, 2018.

Applications of Symmetry Methods, Eds. A. Qadir and K. Saifullah, National Centre for Physics, Islamabad, 2006.

Refereed Journal Papers

(Authors appear in alphabetical order)

1. *Conformal hairy black holes of quartic quasi-topological gravity with power-Yang-Mills source*, (A. Ali, K. Saifullah) *European Physical Journal C* **83** (2023) 911.
2. *Rotating black branes in Lovelock gravity with double-logarithmic electrodynamics*, (A. Ali, K. Saifullah) *Annals of Physics* **446** (2022) 169094.
3. *Effects of quintessence and configuration of strings on the black holes of Lovelock-scalar gravity*, (A. Ali, K. Saifullah) *European Physical Journal C* **82** (2022) 408.
4. *(2+1)-dimensional black holes of Einstein's theory with Born-Infeld type electrodynamic sources*, (A. Ali, K. Saifullah) *European Physical Journal C* **82** (2022) 131.
5. *The non-Kerr black hole with acceleration*, (U. A. Gillani, R. Rahim, K. Saifullah) *Astroparticle Physics* **138** (2022) 102684.
6. *Charged black holes in 4D Einstein-Gauss-Bonnet gravity coupled to nonlinear electrodynamics with maximum allowable symmetries*, (A. Ali, K. Saifullah) *Annals of Physics* **437** (2022) 168726.
7. *Conformal symmetries of the energy-momentum tensor of spherically symmetric static spacetimes*, (U. Camci, K. Saifullah) *Symmetry* **14** (2022) 647.
8. *The charged CPR black hole*, (R. Rahim, K. Saifullah) *International Journal of Modern Physics D* **31** (2022) 2150123.
9. *Magnetized black holes surrounded by dark fluid in Lovelock-power-Yang-Mills gravity*, (A. Ali, K. Saifullah) *Journal of Cosmology and Astroparticle Physics*, *JCAP* **10** (2021) 058.
10. *The CPR black hole with acceleration*, (U. A. Gillani, K. Saifullah) *European Physical Journal C* **81** (2021) 841.

11. *Hawking radiation and particle dynamics in accelerating non-Kerr black holes*, (U. A. Gillani, K. Saifullah) *General Relativity and Gravitation* **53** (2021) 94.
12. *Thermodynamics of dynamical wormholes*, (M. Rahman, K. Saifullah) *Journal of Cosmology and Astroparticle Physics*, *JCAP* **06** (2021) 020.
13. *Thermodynamics of traversable wormholes in $f(R,T)$ gravity*, (M. Rahman, K. Saifullah) *International Journal of Geometric Methods in Modern Physics* **18** (2021) 2150175.
14. *Particle dynamics and geometric optics in Chern-Simons black holes*, (R. Rahim, K. Saifullah) *Annals of Physics* **428** (2021) 168435.
15. *Hawking radiation screening and shielding in Kerr-Newman and charged accelerating black holes*, (U. A. Gillani, K. Saifullah) *Astroparticle Physics* **125** (2021) 102496.
16. *The Hawking mass for an ellipsoidal surface*, (R. Rahim, K. Saifullah) *Modern Physics Letters A* **35** (2020) 2050073.
17. *Effect of charge and deformation parameter on energy extraction in charged non-Kerr black holes*, (R. Rahim, K. Saifullah) *International Journal of Modern Physics D* **28** (2019) 2040012.
18. *Magnetized topological black holes of dimensionally continued gravity*, (A. Ali, K. Saifullah) *Physical Review D* **99** (2019) 124052.
19. *Unified first law for traversable wormholes in non-minimal coupling of curvature and matter*, (M. Rahman, K. Saifullah) *Annals of Physics* **407** (2019) 57.
20. *Charging the Johannsen-Psaltis spacetime*, (R. Rahim, K. Saifullah) *Annals of Physics* **405** (2019) 220.
21. *Asymptotic magnetically charged non-singular black hole and its thermodynamics*, (A. Ali, K. Saifullah) *Physics Letters B* **792** (2019) 276.
22. *Greybody factor of a scalar field from Reissner-Nordstrom-de Sitter black hole*, (J. Ahmed, K. Saifullah) *European Physical Journal C* **78** (2018) 316.
23. *Greybody factor of scalar fields from black strings*, (J. Ahmed, K. Saifullah) *European Physical Journal C* **77** (2017) 885.
24. *GUP-corrected thermodynamics of accelerating and rotating black holes*, (M. Rizwan, K. Saifullah) *International Journal of Modern Physics D* **26** (2017) 1741018.
25. *Hawking radiation from magnetized Kerr–Newman black hole*, (M. Rizwan, K. Saifullah) *General Relativity and Gravitation* **48** (2016) 163.
26. *Accelerating black holes, spin-3/2 fields and C-metric*, (H. Lin, K. Saifullah, S-T. Yau) *Modern Physics Letters A* **30** (2015) 1550044.

27. *Quantum tunneling from three-dimensional black holes*, (A. Ejaz, H. Gohar, H. Lin, K. Saifullah, S-T. Yau) Physics Letters B **726** (2013) 827-833.
28. *Lie symmetries of the Ricci and energy-momentum tensors*, (H. Khan, A. Qadir, K. Saifullah, M. Ziad) European Physical Journal Plus **128** (2013) 144.
29. *Quantum tunneling from scalar fields in rotating black strings*, (H. Gohar, K. Saifullah) Astroparticle Physics, **48** (2013) 82 - 85.
30. *Thermodynamics of accelerating and rotating black holes*, (M. Bilal, K. Saifullah) Astrophysics and Space Science, **343** (2013) 165 - 171.
31. *Emission of scalar particles from cylindrical black holes*, (H. Gohar, K. Saifullah) Astrophysics and Space Science, **343** (2013) 181-185.
32. *Scalar field radiation from dilatonic black holes*, (H. Gohar, K. Saifullah) General Relativity and Gravitation, **44** (2012) 3163-3167.
33. *Thermodynamics of charged and rotating black strings*, (A. Fatima, K. Saifullah) Astrophysics and Space Science, **341** (2012) 437-443.
34. *The Plebanski-Demianski class of black holes and quantum tunneling*, (K Saifullah) J. Phys.: Conf. Ser. **354** (2012) 012016.
35. *Hawking temperature of rotating charged black strings from tunneling*, (J. Ahmed, K. Saifullah) Journal of Cosmology and Astroparticle Physics, JCAP **11** (2011) 023.
36. *Hawking radiation of Dirac particles from black strings*, (J. Ahmed, K. Saifullah) Journal of Cosmology and Astroparticle Physics, JCAP **08** (2011) 011.
37. *Charged fermions tunneling from accelerating and rotating black holes*, (M. Rahman, K. Saifullah) Journal of Cosmology and Astroparticle Physics, JCAP **03** (2011) 001.
38. *Thermodynamic geometry of charged rotating BTZ black holes*, (M. Akbar, H. Quevedo, K. Saifullah, A. Sanchez, S. Taj) Physical Review D **83** (2011) 084031.
39. *Hawking radiation of scalar particles from accelerating and rotating black holes*, (U. A. Gillani, M. Rahman, K. Saifullah) Journal of Cosmology and Astroparticle Physics, JCAP **06** (2011) 016.
40. *Tunneling of Dirac particles from accelerating and rotating black holes*, (U. A. Gillani, K. Saifullah) Physics Letters B **699** (2011) 15-20.
41. *Quantum corrections to the entropy of Einstein-Maxwell dilaton-axion black holes*, (M. Akbar, K. Saifullah) General Relativity and Gravitation, **43** (2011) 933-943.
42. *Quantum corrections to the entropy of charged rotating black holes*, (M. Akbar, K. Saifullah) European Physical Journal C **67** (2010) 205-211.
43. *Approximate symmetries of geodesic equations on 2-spheres*, (K. Saifullah, K. Usman) Il Nuovo Cimento B **125** (2010) 297-307.

44. *Conformal motions in plane symmetric static spacetimes*, (K. Saifullah, Shair-e-Yazdan) International Journal of Modern Physics D, **18** (2009) 71-81.
45. *On the definition of matter collineations*, (A. Qadir, K. Saifullah) Modern Physics Letters A **24** (2009) 2769-2775.
46. *Conformal Ricci collineations of static spherically symmetric spacetimes*, (U. Camci, A. Qadir, K. Saifullah) Communications in Theoretical Physics **49** (2008) 1527-1532.
47. *Geometric symmetries on Lorentzian manifolds*, (K. Saifullah) Il Nuovo Cimento B, **122** (2007) 447-457.
48. *Lie symmetries of the energy-momentum tensor for plane symmetric static spacetimes*, (K. Saifullah) International Journal of Modern Physics D, **14** (2005) 797-816.
49. *Weyl collineations that are not curvature collineations*, (I. Hussain, A. Qadir, K. Saifullah) International Journal of Modern Physics D, **14** (2005) 1431-1437.
50. *Comments on matter collineations of plane symmetric, cylindrically symmetric and spherically symmetric spacetimes*, (A. Qadir, K. Saifullah) Journal of Mathematical Physics, **45** (2004) 4191-4192.
51. *An algorithm for finding the Lie symmetries of tensors*, (K. Saifullah) Il Nuovo Cimento B, **118** (2003) 1137-1147.
52. *Classification of cylindrically symmetric static spacetimes according to their Ricci collineations*, (A. Qadir, K. Saifullah, M. Ziad) General Relativity and Gravitation, **35** (2003) 1927-1976.

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53. *Hawking radiation as quantum tunneling*, (J. Ahmed, K. Saifullah) PoS (ICRC2019) 777, 36th International Cosmic Ray Conference -ICRC2019- July 24th - August 1st, 2019, Madison, WI, U.S.A, 2019.
54. *Effective temperature function for freely falling observers of Reissner-Nordström black hole*, (A. Ali, S. Elahi and K. Saifullah) in Mathematical Physics, Proceedings of the 14th Regional Conference, November 9-14, 2015, Quaid-i-Azam University, Islamabad, Pakistan, Eds. M.J. Aslam and K. Saifullah, p. 116, World Scientific, Singapore, 2018.
55. *Black holes in Melvin universe*, (M. Rizwan, K. Saifullah) Proceedings of International Conference on Relativistic Astrophysics, February 10-14, 2015, University of the Punjab, Lahore, Ed. M. Sharif, pp. 183-187, University of the Punjab, 2015.
56. *Integrability conditions for conformal Ricci collineation equations*, (M. Afzal, U. Camci, K. Saifullah) in Mathematical physics, Proceedings of the 13th Regional Conference, October 27–31, 2010, Antalya, Turkey, Eds. U. Camci and I. Semiz, pp. 103-115, World Scientific, Hackensack, NJ, 2013.
57. *Curvature and Weyl collineations of spacetimes*, (A.R. Kashif, K. Saifullah) Proceedings of the Twelfthth Marcel Grossmann Meeting on Recent Developments in

Theoretical and Experimental General Relativity, Astrophysics and Relativistic Field Theories, Eds. T. Damour, R. Jantzen and R. Ruffini, pp. 1905-1907, World Scientific, Singapore, 2012.

58. *Exact differential and quantum corrections of entropy for axially symmetric black holes*, (M. Akbar, K. Saifullah) Proceedings of the Twelfthth Marcel Grossmann Meeting on Recent Developments in Theoretical and Experimental General Relativity, Astrophysics and Relativistic Field Theories, Eds. T. Damour, R. Jantzen and R. Ruffini, pp. 1126-1128, World Scientific, Singapore, 2012.
59. *Symmetries of the Weyl tensor in Bianchi V spacetimes*, (A.R. Kashif, K. Saifullah, G. Shabbir) Proceedings of the Eleventh Marcel Grossmann Meeting on Recent Developments in Theoretical and Experimental General Relativity, Gravitation and Relativistic Field Theories, Eds. H. Kleinert, R.T. Jantzen and R. Ruffini, pp. 2213-2215, World Scientific, Singapore, 2008.
60. *Classification of spacetimes according to conformal Killing vectors*, (K. Saifullah) Proceedings of the Eleventh Marcel Grossmann Meeting on Recent Developments in Theoretical and Experimental General Relativity, Gravitation and Relativistic Field Theories, Eds. H. Kleinert, R.T. Jantzen and R. Ruffini, pp. 2216-2218, World Scientific, Singapore, 2008.
61. *Homothetic and conformal motions*, (K. Saifullah) in Mathematical Physics, Proceedings of the 12th Regional Conference, National Centre for Physics, March 27 – April 1, 2006, Pakistan, Eds. M.J. Aslam, F. Hussain, A. Qadir, Riazuddin and H. Saleem, pp. 393-399, World Scientific, Singapore, 2007.
62. *Some cylindrically symmetric solutions of the Einstein field equations using symmetry methods*, (K. Saifullah) in Applications of Symmetry Methods, Eds. A. Qadir and K. Saifullah, pp. 137-163, National Centre for Physics, Islamabad, 2006.
63. *Ricci conformal collineations for static spacetimes*, (K. Saifullah as invited speaker) in Mathematical Physics: Proceedings of the XI Regional Conference, May 3-6, 2004, Tehran, Iran, Eds. S. Rahvar, N. Sadooghi & F. Shojai, World Scientific, Singapore, 2005.

Preprints and Others

64. *(2+1)-dimensional black holes of Einstein's theory with Born-Infeld type electrodynamic sources*, (A. Ali, K. Saifullah) submitted for publication.
65. *Effects of quintessence and configuration of strings on the black holes of Lovelock-scalar gravity*, (A. Ali, K. Saifullah) submitted for publication.
66. *Rotating black branes in Lovelock gravity with double-logarithmic electrodynamics*, (A. Ali, K. Saifullah) submitted for publication.
67. *Lorentz symmetry violating BTZ black holes in massive gravity*, (A. Ali, K. Saifullah) submitted for publication. Available at: <https://arxiv.org/abs/2004.02005> .

68. *Energy extraction and the centre of mass energy in slowly rotating Chern-Simons black holes*, (R. Rahim, K. Saifullah) submitted for publication. Available at: <https://arxiv.org/abs/1906.05632> .
69. *Thermodynamics of noncommutative BTZ black hole*, (R. Jahangir, K. Saifullah). Available at: <http://arxiv.org/abs/1101.6073> .
70. *Names, second names, family names, surnames (Letter)*, (K. Saifullah) Notices of the American Mathematical Society, **53** (2006) 862.
71. *Mathematics in Pakistan (Letter)*, (A. Qadir, K. Saifullah) Notices of the American Mathematical Society, **59** (2012) 262.