Special Transformations on Weyl Manifold with a special metric connection

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In this work, we obtain conformal, and projective curvatures. Also, we examine the geometric structures,and the curvature properties of Weyl manifold with semi-symmetric recurrent metric connection under conformal and projective transformations.

References

1. *Eisenhart, L. P. 1927. Non-Riemannian Geometry. New York: The American Mathematical Society Publishing.*
2. *Hlavaty, V. 1949. "Theorie d'immersion d'une W_m dans W_n", Ann. Soc. Polon. Math., 21, 196-206.*
3. *Yano, K. 1970. "On semi-symmetric metric connection", Rev. Roumaine Math. Pures Appl., 15, 1579-1*
4. *Liang, Y. X. 1994. "On semi-symmetric recurrent-metric connection", Tensor (N.S.), 55, 107-112.*
5. *Gribacheva, D. K. 2003. "Conformal transformations and their conformal invariants on Weyl Spaces", Tensor (N.S.), 64(8), 93-99.*
6. *Chowdhury, J., Kumar, R. 2013. "A note on the quasi-conformal and M-Projective curvature tensor of a semi-symmetric recurrent metric connection on a Riemannian Manifold", SDU Journal of Science (E-Journal), 8(2), 190-194.*
7. *Maralabhavi, Y. B. 1985. "A note on the conformal transformation in a W-recurrent space", Indian J. Pure Appl. Math., 16(4), 365-372.*
8. *Thomas, T. Y. 1925. On projective and equiprojective geometries of paths, Proc. Nat. Acad. Sci., 11, 198-203.*
9. *Özdemir, F., Canfes, E. 2012. "On generalized conformally recurrent Kaehlerian Weyl Spaces", Iranian Journal of Science and Technology, A3, 299-304.*