

5TH IFSCOM2018 ABSTRACT BOOK
ISBN: 978-605-68670-1-9

IFSCOM2018
5TH IFS AND CONTEMPORARY MATHEMATICS CONFERENCE
SEPTEMBER, 05-09, 2018, KAHRAMANMARAS, TURKEY
pp:27-28

Q TENSOR ON SASAKIAN MANIFOLDS

HULYA BAGDATLI YILMAZ

ABSTRACT

The object of present work is to study Sasakian manifolds satisfying certain conditions on Q tensor whose trace is the well-known Z tensor.

REFERENCES

- [1] D. E. Blair, Contact manifolds in Riemannian geometry, Lecture Notes in Math., Springer-Verlag, Berlin (1976).
- [2] U. C. De, J. B. Jun and A. K. Gazi, Sasakian manifolds with quasi-conformal curvature tensor, Bull. Korean Math. Soc., Vol.45, N.2, pp.313-319 (2008).
- [3] J. P. Jaiswal, The existence of weakly symmetric and weakly Ricci-Symmetric Sasakian manifolds admitting a quarter symmetric metric connection, Acta Math. Hungar., 132(4),358-366,(2011).
- [4] A. Kushwaha and D. Narain, Some curvature properties on Sasakian manifolds, J of International Academy of Physical Sciences,20(4), 293-302, (2016).
- [5] C. A. Mantica and L. G. Molinari, Weakly Z -symmetric manifolds, Acta Math. Hungary, 135, 80-96, (2012).
- [6] C. A. Mantica and L. G. Molinari, Riemann compatible tensors, Colloq. Math., 128(2), 197-200,(2012).
- [7] C. A. Mantica and Y. J. Suh, Pseudo Q -symmetric Riemannian manifolds, International Journal of Geometric Methods in Modern Physics, 10(5), 1-25, (2013).
- [8] R. H. Ojha, M -projectively flat Sasakian manifolds, Indian J. Pure Appl. Math., 4 (17), 481-484, (1986).
- [9] S. Sasaki, On differentiable manifolds with certain structures which are closely related to almost contact structure, Tohoku Math. J., 12, 459-476, (1960).
- [10] S. Sasaki, Lecture note on almost contact manifolds , Part I, Tohoku University, (1965).
- [11] S. Sasaki, Lecture note on almost contact manifolds , Part II, Tohoku University, (1967).
- [12] H. Sing and Q. Khan, On generalized recurrent Riemannian manifolds, Pub. Math. Debrecen Hungary, 56/1-2, 87-95, (2000).
- [13] M. Tarafdar, On pseudo-symmetric and pseudo-Ricci-symmetric Sasakian manifolds, Periodica Mathematica Hungarica, 22 (2), 125-129, (1991).
- [14] Y. Yano and M. Kon, Structure on manifolds, Series in Pure Math., World Sci.,1984.

2010 *Mathematics Subject Classification.* Primary 53C25; Secondary 53D10.

Key words and phrases. Sasakian manifold, Q tensor, Projective curvature tensor, Conformal curvature tensor, η -Einstein manifold.

MARMARA UNIVERSITY, DEPARTMENT OF MATHEMATICS, 34722, ISTANBUL, TURKEY
E-mail address: hbagdatli@marmara.edu.tr