

ERRATUM TO “ON LORENTZIAN QUASI-EINSTEIN
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In page 670, some terms are missing. Also in page 675, Theorem 3.2 must undergo some changes. In pages 686–687, some portions will be deleted. In page 688 some additional references will be included. The changes are the following:

Page 670, Line 12:

Should read as: Such a non-Einstein quasi-Einstein manifold of dimension $n \geq 3$ is denoted by QE_n . We note that there exist non-Einstein quasi-Einstein manifolds (M, g) such that the vector ρ is a null vector, i.e., $g(\rho, \rho) = 0$ holds on $U_S \subset M$, e.g. see Example 5.1 of [2].

Page 670, Line 19:

Should read as: Also three dimensional Cartan hypersurfaces are non-Einstein quasi-Einstein manifolds [3].

Page 670, Line-11 to line-9:

Should read as: A Lorentzian quasi-Einstein manifold (briefly, LQE_n) is a non-Einstein quasi-Einstein manifold with the generator ρ as the unit timelike vector field such that $g(\rho, \rho) = -1$. Thus a LQE_n is a non-Einstein Lorentzian manifold whose Ricci tensor satisfies (1.1) such that the generator ρ is the unit timelike vector field. Hence, a QE_n with a Lorentzian metric is a LQE_n .

Page 675, Theorem 3.2:

Theorem 3.2. *Let $(M^n, g), n \geq 3$, be a connected orientable Lorentzian manifold which is either non-compact or compact with vanishing Euler number. If there is a unit timelike generic vector field ρ on M such that the relation $S \wedge S = 2\alpha g \wedge S + 2\beta G$ holds with $\alpha^2 + \beta = 0$, then the manifold is a LQE_n .*

In Section 6 (pages 686–687) from Example 6.5 upto the statement of Theorem 6.1 should be deleted.

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Key words and phrases. quasi-Einstein manifold, Lorentzian quasi-Einstein manifold.

Page 688, the following references should be added:

References

- [1] U. C. De and B. K. De, *On quasi Einstein manifolds*, Commun. Korean Math. Soc. **23** (2008), no. 3, 413–420.
- [2] R. Deszcz and M. Hotłoś, *On hypersurfaces with type number two in space forms*, Annales Univ. Sci. Budapest. Eötvös Sect. Math. **46** (2003), 19–34.
- [3] R. Deszcz, L. Verstraelen, and S. Yaprak, *Pseudosymmetric hypersurfaces in 4-dimensional spaces of constant curvature*, Bull. Inst. Math. Acad. Sinica **22** (1994), no. 2, 167–179.

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