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Erratum to the Paper "On Quasi-Riemannian Foliations"

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The argument used in my paper [2] does not work. Namely, the dimension of the space of horizontal vectors tangent to the bundle E considered in the paper is in general less than the dimension of the manifold M. So, the proof of Theorems 1 and 2 in Section 4 is not correct. However, using the estimates of the Lyapunov exponents of Lemma 2, Lemma 3, the Proposition of Section 3 and the Pesin's estimate of entropy [1] one can easily get the following:

Theorem. *There exists an $\eta > 0$ such that for any Riemannian manifold M of finite volume and negative sectional curvature $K_M \leqq -1$ and any transversely complete harmonic $(\varepsilon, 2)$-quasi Riemannian foliation $\mathcal{F}$ of M with $\varepsilon < \eta$ the topological entropy $h(\varphi)$ of the geodesic flow $\varphi = (\varphi_t)$ of the orthogonal complement of $\mathcal{F}$ is positive.*

Corollary. *If M is compact and $K_M < 0$, then the entropy of the geodesic flow of the orthogonal complement of any harmonic Riemannian foliation of M is positive.*

References

[1] YA. PESIN, Characteristic Lyapunov exponents and smooth ergodic theory, Russian Math. Surveys **32** (1977), 54–114.
[2] P. G. WALCZAK, On quasi-Riemannian manifolds, Ann. Global Anal. Geom. **9** (1991), 71–82.