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Erratum to the Paper "A Lower Bound for the Length of Closed Geodesics on a Finsler Manifold"

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Abstract. We correct two clerical errors made in the paper "A Lower Bound for the Length of Closed Geodesics on a Finsler Manifold".

There are two errors in the statements of Theorem 1.2 and Corollary 4.2, respectively in the paper [1]. The condition on the uniformity constant "$\Lambda_F \geq \Lambda$" should be changed to "$\Lambda_F \leq \Lambda$" in both cases. We reformulate them here; the proofs are unchanged.

Theorem 1.2 *Let (M, F) be a closed Finsler m-manifold with $\mathbf{K} \geq \delta$, $\mathbf{T} \leq \varsigma$, $\Lambda_F \leq \Lambda$ and diameter $\leq d$. Then for any simple closed geodesic γ,*

$$L_F(\gamma) \geq \frac{\mu(M)}{c_{m-2}\Lambda^{\frac{3m}{2}}\left[\frac{\mathfrak{s}_\delta^{m-1}\left(\min\{d, \frac{\pi}{2\sqrt{\delta}}\}\right)}{m-1} + \max\{0,\varsigma\}\int_0^d \mathfrak{s}_\delta^{m-1}(t)dt\right]},$$

where $\mu(M)$ is either the Busemann–Hausdorff volume or the Holmes-Thompson volume of M, $L_F(\gamma)$ is the length of γ and $c_{m-2} := \mathrm{Vol}(\mathbb{S}^{m-2})$.

Corollary 4.2 *Let (M, F) be a closed reversible Finsler m-manifold with $|\mathbf{K}| \leq \delta$, $\mathbf{T} \leq \varsigma$, $\Lambda_F \leq \Lambda$, diameter $\leq d$ and $\mu(M) \geq V$, where $\mu(M)$ is either the Busemann–Hausdorff volume or the Holmes-Thompson volume of M. Then*

$$\mathrm{i}_M \geq \min\left\{\frac{\pi}{\sqrt{\delta}}, \frac{V}{2c_{m-2}\Lambda^{\frac{3m}{2}}\left[\frac{\mathfrak{s}_{-\delta}^{m-1}(d)}{m-1} + \max\{0,\varsigma\}\int_0^d \mathfrak{s}_{-\delta}^{m-1}(t)dt\right]}\right\}.$$

References

[1] W. Zhao, *A lower bound for the length of closed geodesics on a Finsler manifold.* Canad. Math. Bull. **57**(2014) no. 1, pp. 194–208. http://dx.doi.org/10.4153/CMB-2012-035-8

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