

CORRIGENDUM TO “ON THE STRUCTURE OF TAKAHASHI MANIFOLDS”

By

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As communicated us by M. Mulazzani (Univ. Bologna, Italy) the last statement of Corollary 8 in [1] is not correct in general. The correct formulation of this corollary is the following

COROLLARY 8. *If $p_i/q_i = p/q$ and $r_i/s_i = r/s$, for every $i = 1, 2, \dots, n$, then the Takahashi manifold $M(p/q, r/s) = M(p/q, \dots, p/q; r/s, \dots, r/s)$ is the two-fold covering of the 3-sphere branched over the link $(\sigma_1^{p/q} \sigma_2^{r/s})^n$.*

As a consequence, the statements of Corollaries 9 and 11 must be changed in the same way. More precisely, we have

COROLLARY 9. *If $p_i/q_i = k/l$ and $r_i/s_i = -k/l$, for every $i = 1, 2, \dots, n$, then the Takahashi manifold $M(k/l, -k/l) = M(k/l, \dots, k/l; -k/l, \dots, -k/l)$ is the Fractional Fibonacci manifold defined in [14], and so it is the two-fold covering of the 3-sphere branched over the link $(\sigma_1^{k/l} \sigma_2^{-k/l})^n$.*

COROLLARY 11. *If $a_i/b_i = k/l$, for any $i = 1, 2, \dots, n$, then the Takahashi manifold $M'(k/l, \dots, k/l)$ is the 2-fold covering of S^3 branched over the closed 3-string braid $(\sigma_1^{k/l+2} \sigma_2)^n$.*

Finally, we also clarify, as C. Petronio (Univ. Pisa, Italy) suggested us, the statement of Theorem 3 in [1] as follows

THEOREM 3. *For any integer $n \geq 2$ there exists $k > 0$ such that the Takahashi manifold $M(p_1/q_1, \dots, p_n/q_n; r_1/s_1, \dots, r_n/s_n)$ is hyperbolic whenever $|p_i| + |q_i| \geq k$ and $|r_i| + |s_i| \geq k$ for all $i = 1, \dots, n$.*

Reference

- [1] B. Ruini – F. Spaggiari, On the structure of Takahashi manifolds, Tsukuba J. Math. **22** (1998), 723–739