Math. Proc. Camb. Phil. Soc. (1994), **116**, 191
Printed in Great Britain

CORRIGENDA

Roll-spun knots

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(*Volume* **113** (1993), 91–96)

(*Received* 15 *April* 1993)

K. Motegi has kindly pointed out that the Lemma in Section 4 of the paper is incorrect. (The assertion in Case 1 on p. 95 that the sewing map of $E(K)$ is periodic is false.) Hence Theorem 6 is unproven. However, we have a weaker result.

THEOREM 6′. *Let K be a knot in S^3, and suppose that K is not a torus knot. For any non-zero integer m, the m-roll spun knot $\rho^m K$ of K cannot be obtained as $\tau^n K$ for any integer n.*

Proof. Suppose that $\rho^m K \sim \tau^n K$ for some n. We may assume that $n \geqslant 0$. By Theorem 3, we have $n \neq 0$. Also, by Theorem 2, $n \neq 1$. The argument given in the paper shows that $K(0)$ is a Seifert fibred manifold with orientable orbit manifold. From the argument in the paper we then obtain that K is a fibred knot whose closed monodromy is isotopic to a periodic homeomorphism. Let F be a fibre of K. Then by Proposition 2, $\rho^m K$ is a fibred knot with fibre W (see Section 2). Note that the closed fibre $\hat{W}$ is a Haken Seifert fibred manifold and $H_1(\hat{W}; Z) \cong Z^{2g(F)}$. Let $\Sigma_n(K)$ be the n-fold cyclic branched cover of K. Since $\pi_1(S^4 - \rho^m K) \cong \pi_1(S^4 - \tau^n K)$, we have $\pi_1(\hat{W}) \cong \pi_1(\Sigma_n(K))$ by considering the commutator subgroup of both sides. Also, $\Sigma_n(K)$ is irreducible since $\pi_1(\hat{W})$ is indecomposable relative to free products. Hence, by [**2**], corollary 6·5, $\hat{W} \cong \Sigma_n(K)$.

Now we have $n > 2$, since $H_1(\hat{W}; Z) \cong Z^{2g(F)}$. From the tables of Dunbar [**1**], if the n-fold cyclic branched cover of a knot is a Seifert fibred manifold for some $n > 2$ then either the knot is a torus knot or it is the figure-eight knot and $n = 3$. But $H_1(\Sigma_3(\text{figure-eight}); Z) \cong Z_4 \oplus Z_4$. Hence, K would be a torus knot, contradicting our assumption.

I am grateful to K. Motegi for his observations.

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[**2**] F. WALDHAUSEN. On irreducible 3-manifolds which are sufficiently large. *Ann. of Math.* **87** (1968), 56–88.