

CORRECTION TO
**FLOW EQUIVALENCE OF DIFFEOMORPHISMS
AND
FLOW EQUIVALENCE OF DIFFEOMORPHISMS II**

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Example 1 (page 53) should be corrected as follows.

Let $Diff_+(S^n)$ and $Diff_+(D^{n+1})$ denote the groups of orientation preserving C^∞ -diffeomorphisms on a sphere S^n and on a disk D^{n+1} resp., and let $r: Diff_+(D^{n+1}) \rightarrow Diff_+(S^n)$ denote the homomorphism obtained by the restriction. Then, the group $D(S^n) = Diff_+(S^n) / Image\ r$ is finite abelian for $n \geq 4$.

Suppose $f \in Diff_+(S^n)$ and $[f] \neq 0$ in $D(S^n)$, and let p denote the order of $[f]$. Let (M, ϕ) be the suspension of the identity map on the mapping torus S^n_f of f . Denote by q the natural fibre map $S^n_f \rightarrow S^1$, we have a fibre bundle $id \times q: S^1 \times S^n_f \rightarrow S^1 \times S^1$. Define $g: S^1 \rightarrow S^1 \times S^1$ by $e^{i2\pi t} \mapsto (e^{i2\pi t}, e^{i2\pi pt})$. If we denote $X = (id \times q)^{-1}g(S^1)$, X is a cross-section of (M, ϕ) . X is diffeomorphic to $S^1 \times S^n \# p\tilde{S}^{n+1}$, where \tilde{S}^{n+1} is a homotopy sphere corresponding to $[f]$. Therefore, X is diffeomorphic to $S^1 \times S^n$. Let \tilde{f} be the associated diffeomorphism of $(M, \phi; X)$. Then $(S^1 \times S^n, \tilde{f})$ is flow C^∞ -equivalent to (S^n_f, id) and $S^1 \times S^n$ is homeomorphic but not diffeomorphic to S^n_f .

Theorem 4.1 (page 55) states that the covering transformation group of $p|Y: Y \rightarrow X$ is isomorphic to Z . But this should be read as follows. If Y is non-connected, the covering transformation group contains a subgroup isomorphic to Z .

Page 62 lines 1~2 should be corrected as follows. This implies that $p|Y: Y \rightarrow X$ is a regular covering and that $\{\sigma^i\} = Z$ is a subgroup of the covering transformation group of $p|Y: Y \rightarrow X$. We can show easily that if Y is connected, the covering transformation group of $Y \rightarrow X$ is isomorphic to Z .

In Lemma 4.2. (page 55), the subset Z should be assumed to be locally connected.

By the above correction of Theorem 4.1, Theorem 5.2 (i) should be eliminated. In page 63 lines 12~11 from the bottom, "with covering ... to Z " should

be eliminated. In page 63 line 5 from the bottom, the part of “generator of the covering transformation group” should be corrected to “covering transformation”.

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