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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: $Diff_+(D^{n+1}) \to Diff_+(S^n)$ denote the homomorphism obtained by the restriction. Then, the group $D(S^n) = Diff_+(S^n)/Image\ r$ is finite abelian for $n \geqq 4$.

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_f^n of f. Denote by q the natural fibre map $S_f^n \to S^1$, we have a fibre bundle $id \times q$: $S^1 \times S_f^n \to S^1 \times S^1$. Define g: $S^1 \to S^1 \times S^1$ 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_f^n, id) and $S^1 \times S^n$ is homeomorphic but not diffeomorphic to S_f^n.

Theorem 4.1 (page 55) states that the covering transformation group of $p|Y$: $Y \to X$ 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 $p|Y$: $Y \to X$ is a regular covering and that $\{\sigma^i\} = Z$ is a subgroup of the covering transformation group of $p|Y$: $Y \to X$. We can show easily that if Y is connected, the covering transformation group of $Y \to X$ 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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