ERRATA CORRECTION TO POINCARÉ COBORDISM EXACT SEQUENCES AND CHARACTERISATION

Himadri Kumar Mukerjee

Volume 146 (1990), 85-101

In view of the remarks of the reviewer (cf. MR 91j: 57021) we give the following clarifications for the benefit of the reader:

1. Theorem (B) page 86 remains true.

2. Theorem (D) page 87 now states the following:

An element $[X] \in \Omega_n^{\text{P.D.}}$ is zero if and only if

(i) $n \neq 0 \pmod{4}$ and all integral as well as \mathbb{Z}/p -normal spherical characteristic numbers of X, \forall prime p, are zero.

(ii) $n \equiv 0 \pmod{4}$ and all integral and \mathbb{Z}/p -normal spherical characteristic numbers of X, \forall prime p, and index of X are zero.

3. The arguments on lines 17 to 19 of page 97 should be given as follows:

and integral as well as \mathbb{Z}/p -normal spherical characteristic numbers \forall odd prime p, and index of X are zero (x being a 2-torsion element) hence ($Z, \tilde{g} \times \lambda, \tilde{c} \times \tilde{\lambda}$) determines (X, f, b) up to oriented cobordism by 2 above.

Justification of 1. First of all the Proposition (5.2) page 94 now remains valid for n odd only. This change however does not affect the definition of ∂ as given in (5.4), (5.5) page 95 and (5.6) page 96 as injectivity of P of Proposition (5.2) is not needed anywhere.

Next, proofs of parts (i) and (ii) of Theorem (B) page 96 do not need injectivity of P of Theorem (5.2) page 94. Lastly, the proof of Theorem (B) part (iii) page 97 for $n \equiv 0 \pmod{2}$ can be made free from Proposition (5.2) page 94 by using the following purely geometrical arguments: The proof of $\partial \circ r = 0$ is the same as in the paper. Let $[(X^n, f, b)] \in \operatorname{Ker} \partial$. Choose a representative (Z^{n-1}, f, b) of $\partial([(X, f, b)])$ such that Z^{n-1} is an oriented P.D. space Poincaré embedded in X^n . (In fact $f: X \to \operatorname{BSG}(k-1) \times S^1 \xrightarrow{\pi_2} S^1$ is