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# *Corrections to "Module Spectra over the Moore Spectrum"*

Shichirô OKA

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Theorem 4.5 in [1] is false. The reason is that the proof of Lemma 4.6 in [1] is incorrect, which was kindly noticed by Professor Z. Yosimura. From Example 6.8 (7) in [1], a counterexample for the theorem is constructed as follows: Let $V$ and $X=C(g)$ be the spectra in the example. Then the sequence $[M\wedge X, X]_0^M \xrightarrow{(1\wedge i_g)^*} [M\wedge V, X]_2^M \xrightarrow{(1\wedge g)^*} [M\wedge V, X]_{-1}^M$ is $0\to Z_p\to 0$, which is not exact.

Since this theorem played an essential role in the proofs of Lemma 6.5 and Theorem 6.6 in [1], we must add some assumptions to these results as well as Theorem 4.5 to complete them. In another paper [2] we used [1, Th. 4.5] to simplify several proofs and we must also correct their proofs, cf. [2, Note on p. 446].

## 1. Corrections to Theorems 4.5 and 6.6 in [1].

**1–1.** Theorem 4.5 in [1] should be replaced by the following, and Lemma 4.6 in [1] should be deleted.

THEOREM 4.5′. *In a cofiber sequence*

$$\Sigma^k X \xrightarrow{f} Y \xrightarrow{i} C(f) \xrightarrow{\pi} \Sigma^{k+1} X,$$

*assume that all spectra are associative M-module spectra and all maps are M-maps. Let Z be an M-module spectrum having the element in* [1, Condition 7.1]. *Then the following sequences are exact*:

$$\cdots \longrightarrow [Z, X]_{j-k}^M \xrightarrow{f_*} [Z, Y]_j^M \xrightarrow{i_*} [Z, C(f)]_j^M \xrightarrow{\pi_*} [Z, X]_{j-k-1}^M \longrightarrow \cdots,$$

$$\cdots \longrightarrow [X, Z]_{j+k+1}^M \xrightarrow{\pi^*} [C(f), Z]_j^M \xrightarrow{i^*} [Y, Z]_j^M \xrightarrow{f^*} [X, Z]_{j+k}^M \longrightarrow \cdots.$$

PROOF. By the direct sum decompositions for $[Z,\ ]_*$ and $[\ , Z]_*$ in [1, Th. 7.5], these exact sequences are easily derived from the usual ones of $[Z,\ ]_*$ and $[\ , Z]_*$.

**1–2.** Lemma 6.5 in [1] should be replaced by the following

LEMMA 6.5′. *Let G be a finite $Z_q$-module and Y be an associative $M_q$-*