

# ERRATA FOR “INVERTIBLE PHASES FOR MIXED SPATIAL SYMMETRIES AND THE FERMIONIC CRYSTALLINE EQUIVALENCE PRINCIPLE”

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There are a few errors in the computations I made in this paper; thanks to Yang Qi and Weicheng Ye for bringing this to my attention.

- (1) The proof of Theorem 5.56 is incorrect; the statement may or may not be correct. A more careful analysis of this proof shows that on the  $E_\infty$ -page of this Atiyah-Hirzebruch spectral sequence, there are either 8 or 16 classes in total degree 1, depending on whether  $d_4: E_4^{2,-1} \rightarrow E_4^{6,-4}$  is nonzero. Therefore the following claims in the paper, which depend on Theorem 5.56, may or may not be correct: Proposition 5.46 and the argument below it computing extensions, and Theorem 5.41.
- (2) Lemma 5.66 is incorrect:  $w_1(V_\lambda)$  is correct, but  $w_2(V_\lambda)$  should be  $a^2 + b$ , not  $b$ . The error is that, restricted to a  $\mathbb{Z}/2$  transposition subgroup of  $S_4$ ,  $\lambda$  should split as  $\sigma^2 \oplus \mathbb{R}$ , not  $\sigma \oplus \mathbb{R}^2$ . This affects the computations in Lemma 5.84 and Theorems 5.71, 5.77, 5.94, and 5.101, which are incorrect and need to be redone.

These errors are mostly self-contained, but they do affect a few other parts of the document.

- (3) Item (4) in §3.1 depends on Theorem 5.41 and may need to be revisited.
- (4) Table 6 includes the results of the theorems mentioned above.

I am in the process of revising this paper to fix these errors and implement a few other changes. When I am done, I will upload a new version on arXiv and here, and resubmit for publication.