CORRIGENDUM TO: SMOOTH NONTRIVIAL
4-DIMENSIONAL $s$-COBORDISMS

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In [1] we constructed a family of nontrivial topological $s$-cobordisms of 3-
dimensional quaternionic spaces. This and further considerations led to the
result that there are either $2^{2^r-r-1}$ or $2^{2^r-r}$ distinct $s$-cobordisms of any
quaternionic space-form $M_r = S^3/Q_r$ to itself, where $Q_r$ denotes the quaternion
group of order $2^{r+2}$. In [2] we erroneously claimed, using in part various
exact sequences in algebraic $L$-theory, that the upper bound was precise,
and used this to detect the topological nontriviality of some explicitly con-
structed smooth $s$-cobordisms. Reconsideration of this material using some
exact sequences of Ranicki [4] and particularly the related unpublished work
on algebraic “visible” $L$-theory of Michael Weiss [5] leads to the opposite
conclusion:

**Theorem.** There are precisely $2^{2^r-r-1}$ topologically distinct $s$-cobordisms
of the quaternionic space $M_r^3$ to itself.

In particular, the questions of whether the construction of [2] is smoothly
a product, as well as the smoothability of the above examples, remain open.
The above theorem will be proved in [3].

**BIBLIOGRAPHY**


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