

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 constructed 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 Reconsideration of this material using some exact sequences of Ranicki [4] and particularly the related unpublished work on algebraic "visible" L -theory of Michael Weiss [5] leads to the opposite conclusion: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].

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