

Cornell University Library We gratefully acknowledge support from the Simons Foundation and member institutions

arXiv.org > math > arXiv:1107.5213

Mathematics > Algebraic Topology

## Homotopy coherent diagrams and approximate fibrations

## Wolfgang Steimle

(Submitted on 26 Jul 2011 (v1), last revised 28 Sep 2011 (this version, v3))

Let p be a fibration over a finite simplicial complex, whose fibers have the homotopy type of finite simplicial complexes. Then p is equivalent to an approximate fibration whose total space is a compact ENR. The proof uses homotopy coherent diagrams and their homotopy colimits. We also comment on the simple homotopy type of the total space and give an application to the fibering of Hilbert cube manifolds.

Comments:	25 pages. Corrected statement of 6.7 and 6.8
Subjects:	<b>Algebraic Topology (math.AT)</b> ; Geometric Topology (math.GT)
MSC classes: Cite as:	55R65,18D20, 55M15, 19J10 arXiv:1107.5213 [math.AT]
	(or arXiv:1107.5213v3 [math.AT] for this version)

## **Submission history**

From: Wolfgang Steimle [view email] [v1] Tue, 26 Jul 2011 13:45:33 GMT (24kb) [v2] Fri, 29 Jul 2011 12:14:25 GMT (24kb) [v3] Wed, 28 Sep 2011 08:30:16 GMT (24kb)

Which authors of this paper are endorsers?

Link back to: arXiv, form interface, contact.

