

Classifying spaces of homotopy sheaves

Pedro Boavida de Brito *

I will describe how one can associate a classifying space to a homotopy sheaf on the category of manifolds. This involves a universal procedure of turning a homotopy sheaf into a homotopy invariant one and it gives a homotopical strengthening of a result of Madsen-Weiss which states that the set of homotopy classes of maps from a manifold X to the classifying space of a sheaf F is in one-to-one correspondence with the set of concordance classes of sections over X . Examples abound.

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