

Global towers of categorical groups as a model for exterior \mathbb{N} -2-types

Aurora Del Río

L. Javier Hernández

M. T. Rivas

Department of Mathematics and Computer Sciences
University of La Rioja

Abstract

The closed model category of exterior spaces, that contains the proper category, is a useful tool for the study of non compact spaces and manifolds. The notion of exterior weak n -equivalences is given by exterior maps which induce isomorphisms on the k -th \mathbb{N} -exterior homotopy group for $0 \leq k \leq n$. The category of exterior spaces with a base ray localized by exterior weak 2-equivalences is called the category of exterior \mathbb{N} -2-types.

In this poster we present a result that establishes that the category of global towers of categorical groups is an algebraic model for exterior \mathbb{N} -2-types.

*The authors acknowledge the financial support given by the projects ANGI2005/10 and MTM2004-01060, 2004-2007.