Dear Editors:

In this article, singular *d*-homology, singular extended *d*-homology, relative singular *d*-homology and relative singular extended *d*-homology functors are introduced and some axioms, such as dimension axiom, homotopy axiom, excision axiom and exactness axiom, of homology theory relative to these homologies are investigated and proved.

 *d*-homology and extended *d*-homology functors are defined for categorical and conceptual homology generalization. Singular (extended) *d*-homology is introduced by composition of this functor with other certain functors. Dimension axiom, Homotopy axiom and in certain conditions Exactness axiom have been investigated in (extended) *d*-homology theory. Finally relative singular (extended) *d−*homology are defined and a comparison of the relative singular homology and relative singular (extended) *d*- homology is given. Some axioms of relative singular (extended) *d−*homology are investigated and established as well.

Best regards

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