

**q-homology of groups**

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**ABSTRACT**

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Some properties of the nonabelian tensor product modulo  $q$  of two crossed modules introduced by Conduché and Rodríguez-Fernández are established, where  $q$  is a positive integer. The notion of  $q$ -homology groups of a group  $G$  with coefficients in a  $G$ -module  $A$  is introduced, some its properties and calculations are given. The relationship between  $q$ -homology groups and the nonabelian derived functors of tensor product modulo  $q$  is studied.

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**Keywords:** *tensor product modulo  $q$ ,  $q$ -homology of groups, derived functors*

**Mathematics Subject Classification:** *20J05, 18G10, 18G50*

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