

PERFECT BRAIDED CROSSED MODULES OF LIE ALGEBRAS

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The non-abelian tensor product of groups, given by Brown-Loday, and the non-abelian tensor product of Lie algebras, given by Ellis, determine the universal central extensions of perfect groups and perfect Lie algebras, respectively. We will talk about the extension theory of braided crossed modules of Lie algebras. Moreover, we will prove the braided version of Casas-Ladra theorem and Ellis theorem.