

## Gabriel Kadjo\*

### *A torsion theory in the category of cocommutative Hopf algebras*

We prove that the category of cocommutative Hopf  $K$ -algebras, over a field  $K$  of characteristic zero, is a semi-abelian category. Moreover, we show that this category is action representable, and that it contains a torsion theory whose torsion-free and torsion parts are given by the category of groups and by the category of Lie  $K$ -algebras, respectively.

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