

Cotorsion pairs and Cartan-Eilenberg categories*

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Cartan-Eilenberg categories were recently introduced by Guillén Santos, Navarro Aznar, Pascual and Roig, (see [1]). In this work we give a method of constructing Cartan-Eilenberg categories for abelian categories, based on cotorsion pairs. In particular we recover the left Cartan-Eilenberg structure for bounded below chain complexes of modules ([3]) and extend it to more general categories, including the category of (quasi-coherent)sheaves over a projective scheme.

Keywords: Cartan-Eilenberg category, coreflective subcategory, cotorsion pair, Hovey pair

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Referencias

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