

COVERING FUNCTORS DEFINED BY THE ACTION OF GROUPOIDS.

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Coverings in the representation theory of algebras were introduced for the Auslander-Reiten quiver of a representation finite algebra in and later for finite dimensional algebras. The best understood class of *covering functors* is that of *Galois covering functors* $F : A \rightarrow B$ determined by the action of a group of automorphisms of A . We report joint work with Ma. Julia Redondo on the class of *balanced covering functors* which include the Galois class and for which classical Galois covering-type results still hold. For instance, if $F : A \rightarrow B$ is a balanced covering functor, where A and B are linear categories over an algebraically closed field, and B is tame, then A is tame. Some of the functors in the studied class are defined by the action of groupoids on linear categories.