

Special biserial and special multiserial algebras

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Abstract

Special biserial algebras are a well-studied class of tame algebras. They comprise many well-known families of algebras such as gentle algebras, string algebras, and Brauer graph algebras. One of the reasons that their representation theory is so well understood is that their indecomposable representations are parametrised by so-called strings and bands. Special multiserial algebras, on the other hand, are mostly of wild representation type. So in particular, there is no hope to classify their indecomposable representations. However, we will see in this lecture course that many of the results known for special biserial algebras still hold for special multiserial algebras. In particular we will give an overview of the main results pertaining to special biserial algebras and we will introduce the class of special multiserial algebras.