

n -cluster-tilting modules of self-injective algebras

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In the classical Auslander-Reiten theory, there is a strong link between representation-finite hereditary and self-injective algebras. In this talk, I shall explain how (parts of) this connection can be generalised from the point of view of higher-dimensional Auslander-Reiten theory. Imitating Riedtmann's classical construction, a large number of self-injective algebras can be shown to have an n -cluster-tilting module. Moreover, n -cluster-tilting modules of such algebras are in bijection with a class of n -cluster-tilting subcategories of the bounded derived category of an algebra of finite global dimension.