Cluster tilting for tilted algebras [*†]

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Abstract

We build a connection between iterated tilted algebras with trivial cluster tilting and tilted algebras of finite type. As a result, we can classify all tilted algebras with cluster tilting in terms of quivers, that is, all tilted algebras with cluster tilting are of finite type. Moreover, we draw the quivers of Auslander's 1-Gorenstein algebras with global dimension 2 admitting trivial cluster tilting subcategories, which implies that such algebras are tilted of finite type but not Nakayama.

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