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On selfinjective artin algebras without short cycles in the component quiver

Let $A$ be a selfinjective artin algebra of infinite representation type, mod $A$ the category of finitely generated right $A$-modules and $\Gamma_A$ the Auslander-Reiten quiver of $A$. Recall that a component $C$ of $\Gamma_A$ is called generalized standard if $\text{rad}^\infty_A(X,Y) = 0$ for all modules $X$ and $Y$ in $C$. Following [?], the component quiver $\Sigma_A$ of an algebra $A$ has the components of $\Gamma_A$ as the vertices and two components $C$ and $D$ are linked in $\Sigma_A$ by an arrow $C \rightarrow D$ if $\text{rad}^\infty_A(X,Y) \neq 0$ for some modules $X$ in $C$ and $Y$ in $D$. In particular, a component $C$ in $\Gamma_A$ is generalized standard if $\Sigma_A$ has no loop in $C$.

The aim of the talk is to present a complete description of the basic, connected selfinjective artin algebras of infinite representation type without short cycles in the component quiver in terms of orbit algebras of repetitive algebras of tilted algebras of Euclidean type or tubular algebras.

References

