

Recollements and n -cluster tilting subcategories

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In this paper, we study the relationship among three n -cluster tilting subcategories of triangulated categories in a recollement. Let (D', D, D'') be a recollement of triangulated categories. We construct an n -cluster tilting subcategory of D by gluing together n -cluster tilting subcategories of D' and D'' under certain conditions. On the other hand, we prove that an n -cluster tilting subcategory of D can induce n -cluster tilting subcategories of D' and D'' . Using these two results, we give a one-to-one correspondence between some n -cluster tilting subcategories of D and pairs of n -cluster tilting subcategories of D' and D'' . Furthermore, we obtain a recollement of abelian categories from a recollement of triangulated categories.

References

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