

Group Actions and Calabi-Yau Duality

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Recently, several investigations in cluster tilting theory focused on the generalised cluster categories associated to the triangulations of certain orbifold surfaces with marked points ([1, 2, 5]). These investigations involve an action of a group on a quiver with potential (QP).

This talk will present general results ([3, 4]) on the behaviour of cluster tilting theory - from the viewpoint of generalised cluster categories - under the actions of finite groups. This includes a description of the skew group algebras $\mathcal{A}(Q, W) * G$ of Ginzburg dg algebras $\mathcal{A}(Q, W)$ acted on by finite groups G as well as a comparison of the associated generalised cluster categories.

References

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