

Stratified Mukai flops and derived categories

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Abstract

A generalization of the Mukai flop has been studied by E. Markman. Here we call it a stratified Mukai flop. In this talk, we observe that, for a stratified Mukai flop: $X \rightarrow \bar{X} \leftarrow X^+$, the fiber product $X \times_{\bar{X}} X^+$ defines an isomorphism of Grothendieck groups $K(X) \rightarrow K(X^+)$, but, on the level of derived categories, the fiber product does not generally give an equivalence.