

## CASTS Algebraic Geometry Summer Program

*Derived categories under standard flips*

Mr. Tang-Kai Lee

2018 - 08 - 23 (Thu.)

10:00 - 11:00

103, Mathematics Research Center Building (ori. New Math. Bldg.)

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In this talk we will first see there are a full exceptional sequence and a semi-orthogonal decomposition in the derived category of a projective space. Later, we will prove Orlov's result on the derived categories under blow-ups. Finally, we will introduce standard flips and flops, the simplest birational correspondences, and prove that the derived categories do not change under standard flops.



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