

# BRIDGELAND STABILITY CONDITIONS ON THE $n$ -KRONECKER QUIVER

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## ABSTRACT

The aim of this talk is to study Bridgeland stability conditions on  $D^b(\text{Rep}(Q_n))$ , where  $Q_n$  is the  $n$ -Kronecker quiver with  $n \in \mathbb{N}$  and  $n \geq 2$ . We first examine indecomposable representations on the  $n$ -Kronecker quiver, particularly exceptional representation i.e. preinjectives and preprojectives. We then give a brief introduction to Bridgeland stability conditions [Bri07]. By using exceptional collections, we describe  $\text{Stab}(\text{Rep}(Q_n))$  as in [Mac07]. Finally, we briefly explain how to extend these ideas to representations of the  $n$ -Kronecker quiver on an Abelian category.

## REFERENCES

[Bri07] T. Bridgeland. Stability conditions on triangulated categories. *Annals of Mathematics*, 166:317–345, 2007.

[Mac07] E. Macrì. Stability conditions on curves. *arXiv preprint arXiv:0705.3794*, 2007.

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