

Definition of [contraction](#)

$$\begin{array}{ccccccc}
 A & \longrightarrow & B & \longrightarrow & C & \longrightarrow & D \xrightarrow{f} \tau A[2] \\
 \uparrow = & & \uparrow = & & \uparrow & & \uparrow = \\
 A & \longrightarrow & B & \longrightarrow & \mathbf{E} & \longrightarrow & A \xrightarrow[\psi]{} \tau A[2]
 \end{array}$$

where  $\psi$  gives the canonical almost split triangle

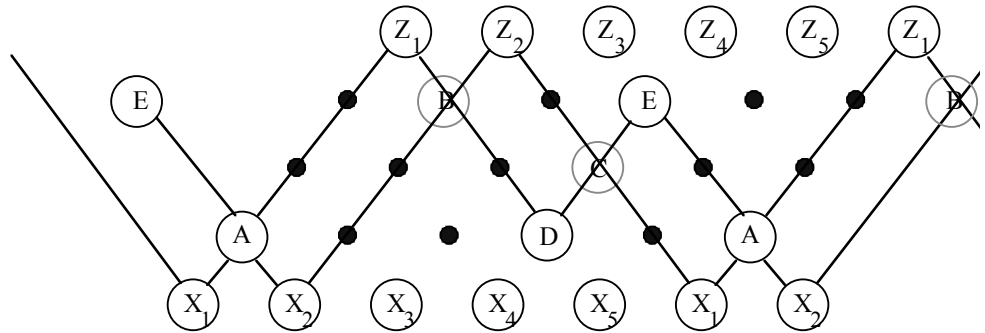
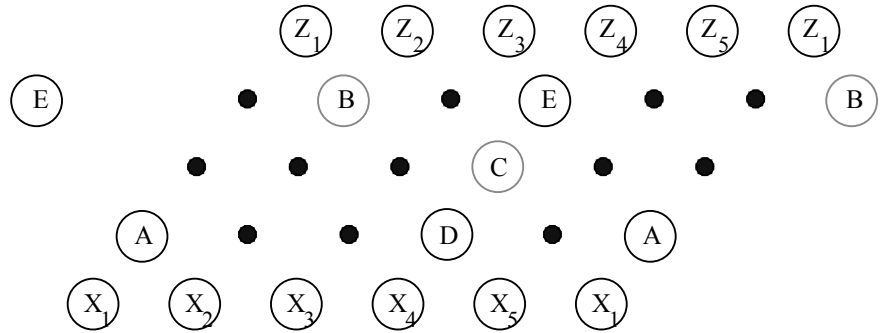
$$A \rightarrow X \rightarrow \tau^{-1}A \xrightarrow{\psi} A[1]$$

dual to  $1_K$  under AR-duality (when  $A$  is exceptional).

$$\text{Hom}(\tau^{-1}A, A[1]) = \text{DEnd}(X) = \text{Hom}(K, K)$$

and  $E$  is the pull-back in the diagram with inessential components  $E_0$  deleted. ( $B \xrightarrow{0} E_0, E_0 \xrightarrow{0} C$ )

$n = 5$   $n-2 = 3$   $D^b(A_5) / \tau[2]$  spaced-out category  
 $m = 2$



Generalized octagon rule

