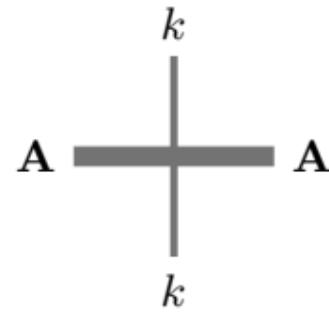
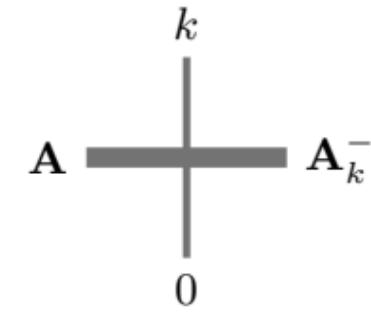


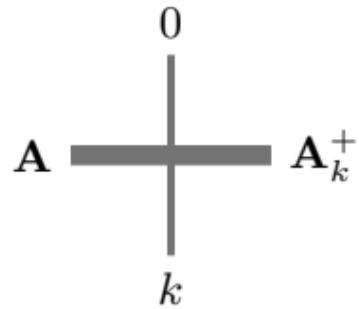
$$1 + O(\epsilon)$$



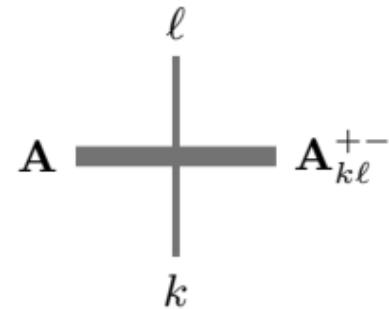
$$q^{\mathsf{P}-A_{[k,n]}} + O(\epsilon)$$



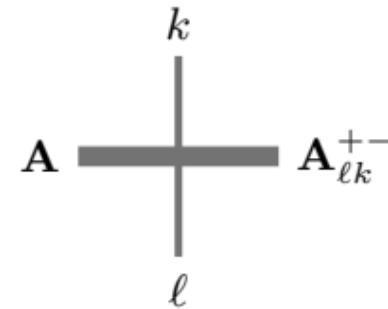
$$\gamma \epsilon u_j^{-1} q^{\mathsf{P}/2+1/2} q^{-A_{[k+1,n]}} (q^{-A_k} - 1)$$



$$1 - q^{\mathsf{P}-|\mathbf{A}|} + O(\epsilon)$$



$$\gamma \epsilon u_j^{-1} q^{\mathsf{P}/2+1/2} q^{-A_{[\ell+1,n]}} (q^{-A_\ell} - 1)$$



$$q^{\mathsf{P}-A_{[k+1,n]}} (q^{-A_k} - 1) + O(\epsilon)$$