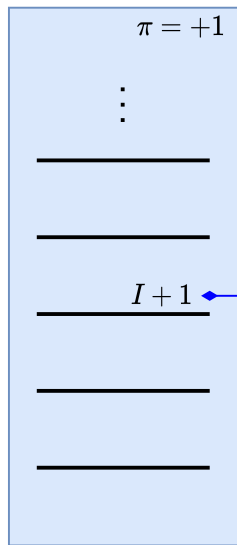
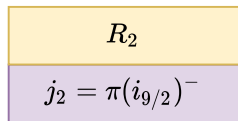


$TSD_4$

$(n_{w_1}, n_{w_2}) : (0, 0)$



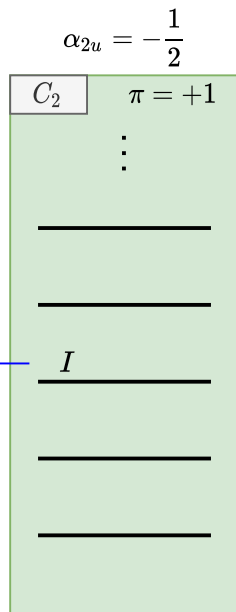
$TSD_3$

$(n_{w_1}, n_{w_2}) : (1, 0)$

**1-wobbling  
phonon  
excitation**

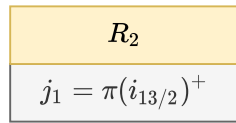


$\Omega_1^I$

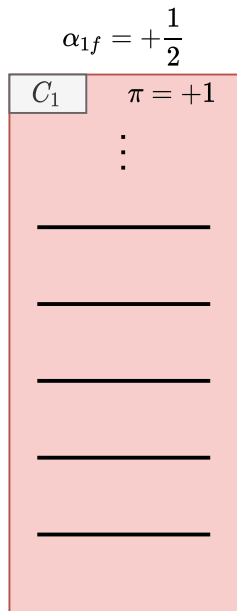


$TSD_2$

$(n_{w_1}, n_{w_2}) : (0, 0)$



**Signature  
Partner  
Bands**



$TSD_1$

$(n_{w_1}, n_{w_2}) : (0, 0)$

