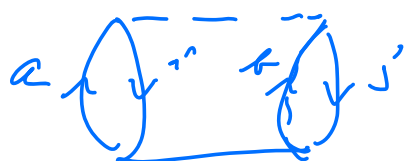


FYS 4480, NOV 25, 2022

CCSD

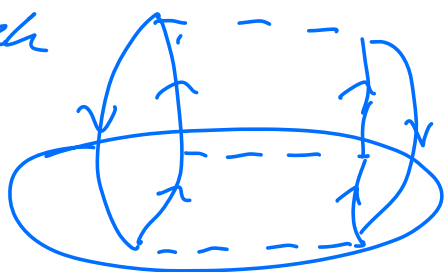
MBPT(2)



$$\frac{1}{4} \sum_{ab} \sum_{i'j'} \langle ij | v | ab \rangle t_{ij}^{ab}$$

$$\frac{1}{4} \sum_{ab} \sum_{i'j'} \langle ij' | v | ab \rangle \frac{\langle ab | v | i'j \rangle}{\epsilon_i + \epsilon_{j'} - \epsilon_a - \epsilon_b}$$

4p2h



→



$$T_2 = \frac{1}{4} \sum_{ab} \sum_{i'j'} t_{ij}^{ab} a_a^\dagger a_b^\dagger a_j a_i$$

$$2p2h - T_2$$

