Modern Quantum Chemistry, Szabo & Ostlund
HW

王石嵘

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3 The Hartree-Fock Approximation

3.1 The Hartree-Fock Equations

3.1.1 The Coulomb and Exchange Operators

3.1.2 The Fock Operator

Ex 3.1

$$\left\langle \chi_i \,\middle|\, \hat{f} \,\middle|\, \chi_j \right\rangle = \chi_i | \sum_a h(a) + \sum_a \sum_{b \neq a} [\mathscr{J}_b(a) - \mathscr{K}_b(a)] | \chi_j$$

$$= \tag{3.1.1}$$