

$$H = \sum_{i=1}^A t_i - T_G + \sum_{i < j}^A v_{ij}, \quad v_{ij} = v_{ij}^C + v_{ij}^T + v_{ij}^{LS} + v_{ij}^{Cmb}$$

$$\delta \frac{\langle \Phi | H | \Phi \rangle}{\langle \Phi | \Phi \rangle} = 0 \quad \Rightarrow \quad \frac{\partial \langle H - E \rangle}{\partial b_\alpha} = 0, \quad \frac{\partial \langle H - E \rangle}{\partial C_i} = 0.$$