

$$E_{\{0\} \rightarrow \{i\}} \left[-\hbar a_i t_i, -\frac{\hbar x_i y_i}{T_i}, \right. \\ \left. \sqrt{T_i} + \left(-\hbar a_i \sqrt{T_i} - \hbar a_i^2 \sqrt{T_i} - \frac{2 \hbar^2 a_i x_i y_i}{\sqrt{T_i}} - \frac{3 \hbar^3 x_i^2 y_i^2}{4 T_i^{3/2}} \right) \epsilon + \mathcal{O}[\epsilon]^2 \right]$$