

$$E_{(1) \rightarrow (1)} \left[\hbar a_1 t_1, \hbar x_1 y_1, \frac{1}{\sqrt{T_1}} + \left(\frac{\hbar a_1}{\sqrt{T_1}} + \frac{\hbar a_1^2}{\sqrt{T_1}} - \frac{\hbar^3 x_1^2 y_1^2}{4 \sqrt{T_1}} \right) \epsilon + O[\epsilon]^2 \right]$$