

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