

$$E_{(1,2) \rightarrow \{\}} \left[\frac{\alpha_2 \tau_1}{\hbar}, \frac{\eta_1 \xi_2}{\hbar}, \mathbf{1} + \left(\frac{\eta_1^2 \xi_2^2}{4\hbar} - \frac{\tau_1 \tau_2}{\hbar} \right) \epsilon + O[\epsilon]^2 \right]$$