

1 In the context of pg 43 of my lecture notes, show that:

$$\mathcal{T}_K [U_E(z) \hat{A}(q_E(z_1))] = \int_{\mathcal{P}} \mathcal{D}q_E e^{-\frac{1}{\hbar} S_E[q_E]} A(q_E(z_1))$$