

$$\langle Q_X^{(s)}(\tau, \vec{k}_1) Q_X^{(s)}(\tau, \vec{k}_2) \rangle = \int^\tau d\tau_1 G_{k_1}(\tau, \tau_1) \int^\tau d\tau_2 G_{k_2}(\tau, \tau_2) \langle J_X(\tau_1, \vec{k}_1) J_X(\tau_2, \vec{k}_2) \rangle.$$