

Problem#14

Perform the Fourier transform of the second order diagram corresponding to figure i) or i+j) in the handout for diagrams using the time formulation. You should of course end up with the corresponding result (also given in one of the handouts) for the energy formulation.

Problem#15

Draw all third order diagrams contributing to the irreducible self-energy. To limit their number you can use the symmetrized version. Select one of them and write the corresponding expression using the energy rules.

We will discuss problems 14 and 15 during the meeting on Monday, October 30, at 3pm.