

Problem (for 12.02.2015)

Prove the following formula for the asymptotics of the Green's function (of the complete (not free!) Hamiltonian):

$$G^{(+)}(E, \mathbf{r}, \mathbf{r}') \approx -\frac{\mu}{2\pi\hbar^2} \frac{e^{ikr}}{r} \left[\psi_{k'}^{(-)}(\mathbf{r}') \right]^*$$

Otherwise, we shall discuss the forthcoming exam during the seminar.