

Problem#2

1. Work out all the steps involving Eqs. (111), (113), and (116).
2. Construct the second quantized hamiltonian for N electrons in an external field $U(\mathbf{r})$ using the $\{\mathbf{r}, m_s\}$ representation. Be sure to evaluate the electron-electron interaction matrix elements.

We will discuss this problem during the meeting on Monday, September 11, at 3pm.