## Homework 6

- 1. (30 points) Express (1 m), (1 s) and (1 kg) in MeV in Natural units. Also calulate the mass of the electron and proton in Natural units.
- 2. (50 points) Describe the kinematics of potential scattering
- 3. (70 points) Calculate the quantum mechanical differential cross section, introducing the scattering amplitude