Homework 1

- 1. (20 points) Starting with four Equations of Maxwell rewrite them in the Lorentz invariant form.
- 2. (10 points) Show that the Lagrange density of Quantum Electrodynamics is local Gauge invariant.
- 3. (20 points) From the Lagrange density obtain Dirac and Maxwell rquations applying Euler Lagrange equation for the fields.