PHY 5667 : Quantum Field Theory A, Fall 2005

November 17th, 2005
Assignment # 6
(due Thursday December 8th, 2005)

1. Derive *Klein-Nishina formula* (Eq. (5.91)) showing all the details of your calculation.

2. Calculate in detail the UV divergent part of the electron self-energy and of the electron vertex function using Pauli-Villars regularization.