

8.324 Problem Set 3

References Peskin and Schroeder, chapters 7,10, Weinberg, chapter 11.

Problem 1 One loop computations Weinberg, problem 11.1.

Problem 2 mass shift for the electron Weinberg, problem 11.4.

Problem 3 Asymptotic behavior in ϕ^4 . Peskin and Schroeder, problem 10.4.