

PHY 5669 : Quantum Field Theory B, Spring 2017

April 13<sup>th</sup>, 2017

Assignment # 6

(due Thursday April 27<sup>th</sup>, 2017)

**Note:** you only need to solve one of the two following problems. They are both quite instructive, and help you getting a better working knowledge of some fundamental aspects of the Standard Model. So, I suggest you work on both, in particular if your research field is Particle Physics. Turning in both problems will give you extra credit only if most of both problems is solved. In other words, try to do at least one problem thoroughly, do not turn in bits and pieces of both problems.

1. Problem 20.2 of Peskin and Schroeder's book.
2. Problem 20.3 of Peskin and Schroeder's book.