

Relativistic Quantum Field Theory, Fall 2006

Homework Assignment # 8

(Due Monday, October 30, after the lecture.)

Lectures and Reading Assignments:

Readings are from “*An Introduction to QFT*” by Peskin and Schroeder.

- Lec 16, 10/23 (Mon): Wick’s Theorem. Feynman Propagator. Feynman Rules. **Sec. 2.4 (“Klein-Gordon Propagator”), 4.3, 4.4**
- Lec 17, 10/25 (Wed): Computing the S Matrix, Part II: Feynman Diagrams **Sec. 4.6, 4.7**
- Lec 18, 10/30 (Mon): Feynman Rules for Quantum Electrodynamics. **Sec. 4.8**

Problems: Numbered problems are from Peskin and Schroeder, Ch. 4.

1. Problem 4.3