

ADVANCED QUANTUM FIELD THEORY: PHYS 6443

Autumn 2014

Instructor: Professor Chung Kao

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Office Hours: Monday and Wednesday, 04:00 PM–05:00 PM

Class Time:

August 18 – December 05

Monday and Wednesday, 10:30 AM – 11:45 AM, in Nielsen Hall 103

Text

Introduction to Quantum Field Theory,

by Michael Peskin and Daniel Schroeder, Westview Press

Supplementary Text

(a). *The Quantum Theory of Fields, Volumes 1 & 2*, by Steven Weinberg, Cambridge University Press;

(b). *Gauge Theories of the Strong, Weak, Electromagnetic Interactions*, by Chris Quigg, Princeton University Press; and

(c). *Quantum Field Theory in a Nutshell*, by Anthony Zee, Princeton University Press.

Exam

Final Exam: December 08, 08:00 AM–10:00 AM (Monday).

Problem Sets

A problem set will be handed out every other Wednesday and it will be due in two weeks. NO late problem sets will be accepted.

Grading

Problem Sets	50%
Final Exam	50%
Total	100%

These are my expectations of you:

1. Always come to class and be prepared to discuss physics.
2. Complete assignments fully and on time.
3. Participate fully in class discussions and problems.
4. Cooperate with classmates, encourage them, and treat them with respect.
5. Come to see me when you have questions.