

Physics 221A

Quantum Field Theory

Fall 2012

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ASSIGNMENT #4

Due: Weds., Oct. 24, 5pm in graders' mailbox.

1. Srednicki 8.5.
2. Srednicki 8.7. You can leave out the second to last sentence. (It's interesting to go through if you want, but I don't want to bog you down with more operator calculations at this point.)
3. Srednicki 9.2
4. Srednicki 9.3

In the last two, ignore the Z 's and counterterms.

The main gist of problems 2 to 4 is to develop some physically important examples: real and complex fields with a quartic interaction.