

## QFT Homework 9 Due 13 Nov 2012

This homework is due in the dropbox outside 2L26 by 11:59PM on the due date. If you wish to turn it in ahead of time, you may email a PDF (prepared with LaTeX) to Dr. Frey.

**Reading:** Srednicki chapters 17-21. (You'll re-read some of this next week.) Please find supplemental reading as you need it.

**To Be Marked By Teachers:** In both questions, make sure you work in  $d$  dimensions and let  $d \rightarrow 4$  at the end.

1. **Propagator Correction in  $\phi^4$**  *Srednicki 14.5*
2. **Vertex Correction in  $\phi^4$**  *Srednicki 16.1*

**Not To Be Marked (Yet)**

3. **Effective Action** *Srednicki 21.1*
4. **Background Fields** *Srednicki 21.3*