

QFT Homework 4 Due 6 Oct 2022

This homework is due to <https://uwcloud.uwinnipeg.ca/s/Xks9XWxz9yo5CpG> by 10:59PM on the due date. Your file(s) must be in PDF format; they may be black-and-white scans or photographs of hardcopies (all converted to PDF), PDF prepared by LaTeX, or PDF prepared with a word processor *using an equation editor*.

I have listed your name with the problem you will present on 21 Sept. Note that you only need to hand in the first section of problems for a grade.

Reading Assignment: Srednicki chapters 5 & 10

Not to be marked Do not submit your answers for the following questions

1. **4-Point Correlator** Presentation: Bardh

Carry out the functional derivatives on the diagram in figure 9.10 to get the diagrams contributing to the connected correlation function in figure 10.1.

2. **LSZ for a Complex Scalar** *Srednicki problem 5.1* Presentation: Naman

For a grade Submit your answers for the following questions

3. **Complex Scalars** *Srednicki 10.2* Presentation: Zunaira
4. **Three-Point Interaction** *Srednicki 10.3* Presentation: Phil