Quantum Field Theory I: PHYS 721 (Fall 2021)
Quick quiz 5

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Instructions

These quick quizzes are low-stakes assessment tools to help cement your understanding of our material. They will help you remember the key facts and can serve as a study guide to help you focus on material you are less familiar with. These quizzes do not contribute to your grade and are for your own use.

1. **Without looking at your notes or the textbook, and without consulting with your neighbour**, write your answer to each question in the **first column**.

2. Discuss with your neighbour and use your notes or the textbook as needed to answer each question and write your answers to each question in the **second column**. You should complete the second column, but do not add anything to your first column.

There are four questions.

Question 1

What is the difference between the field $\phi(x)$ and the operator $a^\dagger(p)$?

Question 2

What is normal ordering?

Question 3

What are the different types of scalar propagators?

Question 4

What are the relations between spin, statistics, and (anti)commutation relations?