

## 8.324 Problem Set 5

**References** Peskin and Schroeder, chapter 11, Weinberg, chapter 12.

**Problem 1 Spin-wave theory** Peskin and Schroeder, problem 11.1.

**Problem 2 N=2 Linear sigma model** Peskin and Schroeder, problem 11.2.

**Problem 3 The Gross-Neveu model** Peskin and Schroeder, problem 11.3.

**Problem 4 non-Renormalizable terms** Weinberg, problem 12.4.