## 961 QUANTUM FIELD THEORY - Midterm Homework - Due: 3/29/2005.

### 1. Energy-Momentum Tensor, Noether's Theorem

Problem 2.1, Peskin and Schroeder

# 2. Quantization of Complex Scalar Fields

Problem 2.2, Peskin and Schroeder

### 3. The Gordon Identity

Problem 3.2, Peskin and Schroeder

### 4. The CPT Theorem

Problem 3.7, Peskin and Schroeder