

Physics 5690
Quantum Many-Body Physics
Problem Set 3
Due: Monday, Feb 24, 2003

3.1 Problem 4, Chapter 2 of N&O, Pg. 132.

3.2 Problem 6, Chapter 2 of N&O, Pg. 132.

3.3 Problem 7, Chapter 2 of N&O, Pg. 134.

3.4 Carefully verify the coherent state path integral expression for the grand partition function given in Eqns. 2.65a and 2.65b, filling in any missing steps in the derivation.