

## QUANTUM MECHANICS II

Physics 342 - Winter Quarter, 2011 - University of Chicago

### PROBLEM SET #1 – DUE TUESDAY, JANUARY 11

This problem set will be worth 8 points. First number is chapter in Sakurai and Napolitano; second is problem number.

Problems 3.30 (2 points), 3.31(a) (1 point), 3.32 (2 points), 3.33 (3 points). There appears to be a misprint in Problem 3.33. The term  $s - 1$  in the denominator of  $H_{\text{int}}$  should be  $2s - 1$ . See Gottfried and Yan, *Quantum Mechanics: Fundamentals* (2nd Ed.), Springer, 2004, p. 253 ff.

Answers will be posted on Chalk once all problem sets have been received.