

# Physics 115C Sixth Problem Set

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1. Exercise 15.2.2, page 413 of text.
2. Consider  $j_1 = 2$  and  $j_2 = 3/2$ . Use the table, or the C-G calculator, to express the product state  $|j_1 m_1, j_2 m_2\rangle = |2 - 1, 3/2 + 1/2\rangle = |m_1 m_2\rangle = |-1 + 1/2\rangle$  in terms of a sum of eigenkets of total angular momentum.
3. Exercise 17.2.1, page 457 of text.