

Homework Assignment #13

Chapter 7 The Hydrogen Atom Wave Function

Modern Physics (3rd Edition) by Kenneth Krane

Due Date: Wednesday, April 27, 2016

In these problems, when the problem asks for mass, energy, and momentum, please write your answers in units of:

Mass $\rightarrow MeV/c^2$ not kilograms !!

Momentum $\rightarrow MeV/c$ not kilograms·meters/sec !!

Energy $\rightarrow MeV$ not joules !!

unless otherwise specified.

When you are asked for velocities, always quote your answers in units of “c,” the speed of light.

$$\text{velocity} = \beta c$$

Problems: **All from Chapter 7**

1	4	6	8	12	14	17
	20	21	28	31	32	

Make sure that you “**Show Your Work.**”