

“All composite objects decay. Strive diligently.” – the Buddha

- 1) [15 points] Jackson 14.21 Use Bohr-model values for the radius and velocity.
- 2) [20 points] Jackson 15.4. Begin with eqns 15.1-15.2 and set the β_j 's to zero, and let the β'_j be the velocity of either particle in the decay. Part (a) is trivial. Watch the sign of the interference term carefully! You'll have to make a reasonable assumption to get from $dI/d\omega$ to the fraction of energy radiated as photons. Also, does Jackson tell you that $m_\pi = 140$ MeV, $m_e = 0.511$ MeV?