- (1) Given a frequency like 56 MHz what is the wavelength of this "light"?
- (2) What is the deal with photons? Which experiment directly shows the existence of the photon?
- (3) Why does the photoelectric effect indirectly show the existence of the photon?
- (4) What are the four predictions of Einstein's explanation of the photoelectric effect?
- (5) What does the wavefunction mean? What do you do this it?
- (6) If you have an energy eigenstate  $\psi_n(x)$  then what is  $\psi_n(x,t)$ ?
- (7) How can we create (mathematically) a localized wave packet for a particle?