

Wavelengths of Various "Particles"

Calculate the wavelength of

- a. an electron that has been accelerated from rest across a 3-Volt potential difference ($m_e = 9.11 \times 10^{-31}$ kg).
- b. Ditto for a proton ($m_p = 1.67 \times 10^{-27}$ kg).
- c. a major league fastball ($m_{\text{baseball}} = 0.15$ kg, $v = 50$ m/s).