Answer on Question #63434, Chemistry / General Chemistry

A muon (a subatomic particle with a mass of 1.884 x 10 ^-25 g) traveling at 305 m/s.

Solution:

$$\lambda = \frac{h}{mv} = \frac{6.626 \cdot 10^{-34} Js}{1.884 \cdot 10^{-28} kg \times 305 \; m/s} = 11.5 \; nm$$

Answer: 11.5 nm