## Quiz 11

The below represents the spectra of the X-ray light produced by slamming high-speed electrons into a solid target. The bright peaks labeled K $\alpha$ , K $\beta$ , L $\beta$  will be discussed in the next chapter. What was the speed of the electrons before they hit the solid? Values are provided for the speed of light, Planck's constant, and the mass of an electron.

$$c = 3 \times 10^8 \text{ m/s}$$
  
 $h = 6.63 \times 10^{-34} \text{ J} \cdot \text{s}$   
 $m_e = 9.11 \times 10^{-31} \text{ kg}$   
 $K\beta$   
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