

Answer on question #62257, Physics | Quantum Mechanics

Mathematical equation that shows the relationship among energy, wavelength, and speed of light and give me the name of this equation.

Answer:

According to Planck's hypothesis, the smallest portion of energy carried by radiation is determined by the formula (**Planck's formula**):

$$E = h\nu$$

Energy can be expressed by the wavelength:

$$E = h \frac{c}{\lambda}$$

where:

E = energy of the photon (in Joules); h = constant, actually known as Planck's constant, a really ugly number; c = speed of light, another constant; λ = wavelength of the light, usually in units of meters