

1.94: Wave-Particle Duality for Matter and Light

A wave is spatially delocalized



A particle is spatially localized



These incompatible concepts are united by the deBroglie wave equation with the wave property (wavelength) on the left and the particle property (momentum) on the right in a reciprocal relationship mediated by the ubiquitous Planck's constant.

$$\lambda = \frac{h}{mv}$$

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